

**UNITED STATES
AIR FORCE**

**OCCUPATIONAL
SURVEY REPORT**

19961127 034

F-15/F-111 AVIONIC SYSTEMS

AFSC 2A3X1A/B/C

AFPT 90-452-024

JUNE 1996

OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449

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DISTRIBUTION FOR AFSC 2A3X1A/B/C OSR

| | <u>OSR</u> | <u>ANL EXT</u> | <u>TNG EXT</u> | <u>JOB INV</u> |
|---|------------|--------------------|--------------------|--------------------|
| AFOMS/OMDQ | 1 | | | |
| AFOMS/OMYXL | 10 | | 5 | 10 |
| AL/HRMM | 2 | | | |
| AL/HRTE | 1 | | 1 | |
| ARMY OCCUPATIONAL SURVEY BRANCH | 1 | | | |
| CCAF/AYX | 1 | | | |
| DEFENSE TECHNICAL INFORMATION CENTER | 2 | | | |
| HQ ACC/DPTTF | 3 | | 3 | |
| HQ AETC/DPPEE | 3 | | 3 | |
| HQ AFPC/DPAAD5 | 1 | | | |
| HQ AFPC/DPPAPC | 1 | | | |
| HQ PACAF/DPAET | 3 | | 3 | |
| HQ USAF/LGMM | 1 | | 1 | |
| HQ USAFE/DPATTJ | 3 | | 3 | |
| HQ USMC/STANDARDS BRANCH | 1 | | | |
| NAVMAC | 1 | | | |
| USAFAMS/DTMP | 1 | | 1 | 1 |
| 365 TRS/DOP (710 H AVENUE, STE 2, SHEPPARD AFB TX 76311-2856, ATTENTION: MSGT LARRY HOFER) | 3 | 1 | 4 | 3 |
| 782 TRG/TTS (710 H AVENUE, BUILDING 920, SHEPPARD AFB TX 76311-2856) | 1 | | 1 | |

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PREFACE

This report presents the results of an Air Force Occupational Survey of the AFSC 2A3X1A/B/C F-15/F-111 Avionic Systems career ladder. Authority to conduct occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

Mr. Tom Duffy, Inventory Development Specialist, developed the survey instrument. First Lieutenant James A. Coleman, Occupational Analyst, analyzed the data and wrote the final report. First Lieutenant Sheon Mendoza provided computer programming support, and Mr. Richard Ramos provided administrative support.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the Air Force Occupational Measurement Squadron, Attention: Chief, Occupational Analysis Flight (OMY), 1550 5th Street East, Randolph AFB Texas, 78150-4449 (DSN 487-6623).

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SUMMARY OF RESULTS

1. Survey Coverage: The AFSC 2A3X1A/B/C F-15/F-111 Avionic Systems career ladder was surveyed to obtain current task and equipment data for use in examining training programs. Survey results are based on responses from 1,185 AFSC 2A3X1A/B/C personnel (59 percent of the assigned population). Skill levels and paygrades were well represented.
2. Career Ladder Structure: Structure analysis identified two clusters (containing a total of 9 jobs) and five jobs: Flightline Maintenance cluster (containing the F-15 Attack Control Systems job; F-111 Attack Control Systems job; Communication, Navigation, and Penetration Aids job; Instrument and Flight Control Systems job; Multi-System Specialty job; and Test Squadron job), FTD Instructor job, Debriefer job, Maintenance Operations Control Center Coordinator job, Quality Assurance job, Management cluster (containing the Expediter job, Supervisor job, and Manager job), and the Tools and Equipment job. The Flightline Maintenance cluster dominates the specialty, accounting for 77 percent of the respondents.
3. Career Ladder Progression: Personnel in the F-15/F-111 Avionic Systems career ladder show a typical pattern of career progression. Three-skill level personnel perform essentially technical tasks. At the 5-skill level, a moderate shift towards supervisory functions occurs, with members still spending about 85 percent of their job time performing technical duties. Seven-skill level personnel split their time almost evenly between supervisory functions and technical tasks, while 9-skill level members focus more heavily on managerial and supervisory functions (almost 90 percent of their job time). Specialty descriptions in the CFETP provide a broad and accurate overview of tasks and duties performed within the career ladder.
4. Training Analysis: The STS and the POIs for courses J3ABR2A331A 000/001, J3ABR2A331B 000/001, and J3ABR2A331C 000/001 are well-supported by survey data. However, there are several tasks not matched in either document that require review for possible inclusion in the training documents.
5. Job Satisfaction Analysis: Overall, AFSC 2A3X1A/B/C respondents appear satisfied with their jobs. When compared to other non-lateral logistics AFSCs surveyed in 1994, AFSC 2A3X1A/B/C members reported comparable ratings (AFSC members with 1-48 and 49-96 months TAFMS indicated slightly higher responses than respondents in the comparative sample). Additionally, AFSC 2A3X1A/B/C reenlistment intentions, across all TAFMS groups, were slightly lower than the comparative sample.
6. Implications: Specialty descriptions for the AFSC 2A3X1A/B/C career ladder are accurate. No serious job satisfaction problems appear to exist within this specialty. AFSC 2A3X1A/B/C military reenlistment intentions are about the same as those of a comparative sample of similar Air Force personnel surveyed in 1994.

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OCCUPATIONAL SURVEY REPORT (OSR)
F-15/F-111 AVIONIC SYSTEMS CAREER LADDER
AFSC 2A3X1A/B/C

INTRODUCTION

This is a report of an occupational survey of the AFSC 2A3X1A/B/C F-15/F-111 Avionic Systems career ladder conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). This survey will ensure current data for use in updating career ladder documents and training programs. AFSC 2A3X1A/B/C personnel were last surveyed in 1990 (formerly two separate AFSCs according to aircraft: 452X1 and 452X3). This report is the first to provide insight into the success of the merger of the F-15 and F-111 Avionic Systems career ladders.

Background

According to the Specialty Description contained in the Career Field Education and Training Plan 2A3X1A/B/C, dated October 1994, F-15/F-111 Avionics personnel at the 5-skill level maintain on-equipment avionic systems; perform general aircraft handling procedures; identify avionic systems malfunctions; remove, install, and perform checks of external avionics and electronic countermeasures equipment; perform modifications; and maintain inspection and maintenance records. Additionally, 7-skill level personnel: inspect avionic systems to determine operational status; interpret inspection findings; review maintenance management procedures; and evaluate justification and practicality of modifications. Personnel at the 9-skill level superintend maintenance and staff activities engaged in maintenance of F-15/F-111 aircraft systems/components; plan, organize, and superintend maintenance troubleshooting activities; inspect removal, assembly, and installation of mechanical and electrical components; direct aircraft battle damage repair and crash damaged or disabled aircraft recovery operations; establish priorities for completion of maintenance tasks; provide assistance in solving maintenance, supply, and personnel problems; perform supervisory inspections of maintenance actions on avionic systems/components; and interpret and discuss inspection findings and recommend corrective action.

All entry-level personnel must take the L3AQR40020 500, Electronic Principles course. The 3-skill level is awarded when the Electronic Principles course is taken at Lackland AFB TX, and one of the following six courses is taken at Sheppard AFB TX: J3ABR2A331A 000/001, F-15/F-111 Avionics Attack Control Systems Apprentice; J3ABR2A331B 000/001, F-15/F-111 Avionics Instrument and Flight Control Systems Apprentice; or J3ABR2A331C 000/001, F-15/F-111 Avionics Communication, Navigation, and Penetration Aids Systems Apprentice.

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The Armed Forces Vocational Aptitude Battery score requirement for AFSC 2A3X1A/B/C is "Electronic 67," and a strength factor of "K" (weight lift of 70 lbs) is required.

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI), AFPT 90-452-024, dated November 1993. A tentative task list was prepared after reviewing pertinent career ladder publications and directives and tasks from previous applicable OSRs. The preliminary task list was refined and validated through personal interviews with 22 subject-matter experts (SMEs) at the following locations:

| <u>BASE</u> | <u>REASON FOR VISIT</u> |
|----------------------|--------------------------------|
| Lowry AFB CO | Technical Training School* |
| Mountain Home AFB ID | F-15C/D/E, and EF-111 Aircraft |
| Cannon AFB NM | F-111 Wing |
| Nellis AFB NV | F-15C/D/E Aircraft |

* Tech school has since moved to Sheppard AFB TX

Others contacted included Air Force MAJCOM functional managers and the career field training manager.

The resulting JI contained a comprehensive listing of 587 tasks grouped under 11 duty headings, with a background section requesting such information as grade, job title, time in present job, time in service, time in career field, and job satisfaction indicators.

Survey Administration

From December 1993 through October 1994, survey control monitors at base training offices worldwide administered the inventory to all eligible DAFSC 2A3X1A/B/C personnel. Members eligible for the survey consisted of the total assigned 3-, 5-, 7-, and 9-skill level population, excluding the following: (1) hospitalized personnel; (2) personnel in transition for a permanent change of station; (3) personnel retiring within the time the inventories were

administered to the field; and (4) personnel in their jobs less than 6 weeks. Military participants were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Each individual who completed the inventory first filled in an identification and biographical information section and then checked each task performed in his or her current job. After checking tasks performed, each individual rated the tasks checked on a 9-point scale showing relative time spent on that task, compared to other tasks performed. The ratings ranged from 1 (very small amount time spent) to 9 (very large amount time spent).

To determine relative time spent for each task, all of the incumbent's ratings are assumed to account for 100 percent of the time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time spent on each task.

Survey Sample

Personnel were selected to participate in this study so as to ensure an accurate representation across skill levels and paygrades. Table 1 reflects the MAJCOM distributions of assigned AFSC 2A3X1A/B/C personnel and those members included in the survey sample. Table 2 reflects the assigned personnel and sample distributions by paygrade groups. As shown by both tables, the survey sample accurately reflects the overall population of the career ladder.

TABLE 1
MAJCOM DISTRIBUTION OF 2A3X1A/B/C PERSONNEL

| <u>COMMAND</u> | <u>PERCENT OF ASSIGNED*</u> | <u>PERCENT OF SAMPLE</u> |
|----------------|---------------------------------|--------------------------|
| ACC | 50 | 62 |
| USAFE | 16 | 10 |
| AETC | 15 | 15 |
| PACAF | 12 | 6 |
| Other | 7 | 7 |

Total Assigned = 2,014
 Total Eligible for Survey = 1,726
 Total in Survey Sample = 1,185
 Percent of Assigned in Sample = 59%
 Percent of Eligible in Sample = 69%

* As of November 1993

TABLE 2
PAYGRADE DISTRIBUTION OF SAMPLE

| <u>PAYGRADE</u> | <u>PERCENT OF ASSIGNED*</u> | <u>PERCENT OF SAMPLE</u> |
|-----------------|---------------------------------|--------------------------|
| E-1 to E-3 | 24 | 30 |
| E-4 | 27 | 27 |
| E-5 | 24 | 21 |
| E-6 | 17 | 15 |
| E-7 | 8 | 7 |

* As of November 1993

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2A3X1A/B/C personnel also completed a second booklet for either training emphasis (TE) or task difficulty (TD). The TE and TD booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within this report.

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 72 senior AFSC NCOs who completed a TE booklet were asked to select tasks they felt required some sort of structured training for entry-level personnel, and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams, formal on-the-job training (OJT), or any other organized training method. There was acceptable agreement among the 72 raters. The average TE rating was 2.55, with a standard deviation of 1.61. Any task with a TE rating of 4.16 or above is considered to have high TE.

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 68 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TD and TE ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting Air Force Specialty entry-level jobs.

CAREER LADDER STRUCTURE

The first step in the analysis process is to identify the structure of career ladders in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Programs (CODAP) assist by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

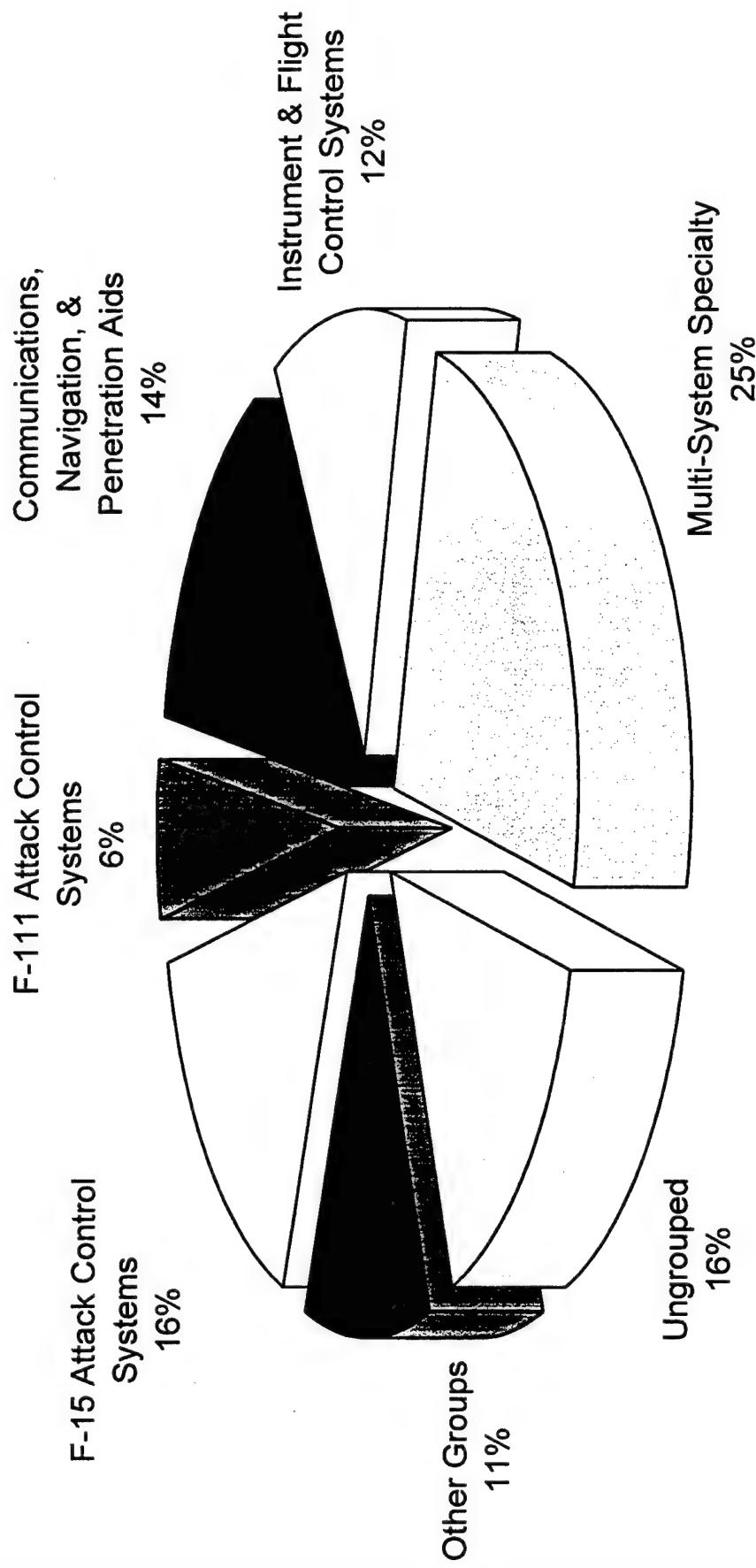
Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, five jobs and two clusters were identified within the AFSC 2A3X1A/B/C survey sample. Figure 1 illustrates the jobs performed by AFSC 2A3X1A/B/C personnel.

A listing of these jobs and job clusters is provided below. The stage (STG) number shown beside each title references computer-printed information; the letter "N" represents the number of personnel in each group.

- I. FLIGHTLINE MAINTENANCE CLUSTER (STG056, N=912)
 - A. F-15 Attack Control Systems Job (STG134, N=194)
 - B. F-111 Attack Control Systems Job (STG144, N=74)
 - C. Communication, Navigation, and Penetration Aids Job (STG136, N=171)
 - D. Instrument and Flight Control Systems Job (STG131, N=144)
 - E. Multi-System Specialty Job (STG142, N=291)
 - F. Test Squadron Job (STG128, N=5)
- II. FIELD TRAINING DETACHMENT (FTD) INSTRUCTOR JOB (STG139, N=9)
- III. DEBRIEFER JOB (STG127, N=13)
- IV. MAINTENANCE OPERATIONS CONTROL CENTER COORDINATOR JOB (STG055, N=13)
- V. QUALITY ASSURANCE JOB (STG117, N=10)
- VI. MANAGEMENT CLUSTER (STG044, N=89)
 - A. Expediter Job (STG107, N=20)
 - B. Supervisor Job (STG354, N=16)
 - C. Manager Job (STG233, N=6)
- VII. TOOLS AND EQUIPMENT JOB (STG096, N=23)

JOBS PERFORMED BY AFSC 2A3X1A/B/C PERSONNEL



Other Groups include: Test Squadron, FTD Instructor, Debriefer, Maintenance Operations Control Center, Quality Assurance, Expediter, Supervisor, Manager, and Tools & Equipment

FIGURE 1

The respondents forming these groups account for 90 percent of the survey sample. The remaining 10 percent were performing tasks which did not group with any of the other defined jobs. Some of the job titles given by respondents which were representative of these personnel include: Flight Chief, Shift Chief, Mobility NCO, Production Supervisor, and Tool Support Monitor.

Group Descriptions

The following paragraphs contain brief descriptions of the five jobs and two clusters identified through the career ladder structure analysis. Appendix A lists representative tasks performed by identified cluster and job groups. Table 3 displays time spent on duties, while Table 4 provides demographic information for each cluster and job discussed within this report.

I. FLIGHTLINE MAINTENANCE CLUSTER (STG056). The 912 members of this cluster represent 77 percent of the total survey sample. This is the core work of the Avionic Systems career ladder. Personnel within this cluster perform an average of 161 tasks, and there are six different jobs within the cluster which are described below.

A. F-15 Attack Control Systems Job (STG134). The 194 members of this job make up 16 percent of the survey sample. They perform an average of 112 tasks. As seen in Table 3, 37 percent of their time is spent working in Duty H (Maintaining Attack Control Systems). The majority of these tasks pertain to removing, replacing, troubleshooting, inspecting, and operationally checking numerous attack control systems components. Representative tasks for this job include:

- operationally check video recording systems
- troubleshoot video recording systems
- remove or install OWS LRUs
- operationally check OWSs
- remove or replace HUD system LRUs
- troubleshoot HUD systems
- remove or replace CC system LRUs
- operationally or BIT check CC systems

Personnel working in the F-15 Attack Control Systems Job have an average of 3 years, 2 months TAFMS, and 78 percent are in their first enlistment. Ninety percent hold a DAFSC of either 2A331A or 2A351A (see Table 4). Sixty-four percent are in paygrades E-1 through E-3.

TABLE 3

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

| DUTIES | F-15 ATTACK CONTROL SYSTEMS JOB (STG134) | F-111 ATTACK CONTROL SYSTEMS JOB (STG144) | COMMUNICATION, NAVIGATION, AND PENETRATION AIDS JOB (STG136) | INSTRUMENT AND FLIGHT CONTROL SYSTEMS JOB (STG131) | MULTI-SYSTEM SPECIALTY JOB (STG142) |
|--|---|--|--|---|---|
| A ORGANIZING AND PLANNING | * | 1 | 1 | 1 | 3 |
| B DIRECTING AND IMPLEMENTING | * | 1 | 1 | 1 | 5 |
| C INSPECTING AND EVALUATING | * | 1 | * | * | 3 |
| D TRAINING | * | 2 | 1 | 1 | 3 |
| E PERFORMING GENERAL ADMINISTRATIVE AND SUPPLY FUNCTIONS | 3 | 3 | 3 | 3 | 2 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 23 | 24 | 18 | 18 | 13 |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 22 | 18 | 18 | 14 | 12 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 37 | 38 | 4 | 4 | 18 |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 2 | 1 | 1 | 48 | 19 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | 4 | 2 | 44 | 2 | 16 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 9 | 9 | 9 | 8 | 6 |

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

| DUTIES | TEST SQUADRON JOB (STG128) | FTD INSTRUCTOR JOB (STG139) | DEBRIEFER JOB (STG127) | MAINTENANCE OPERATIONS CONTROL CENTER COORDINATOR JOB (STG55) |
|--|----------------------------|-----------------------------|------------------------|---|
| A ORGANIZING AND PLANNING | 5 | 11 | 10 | 17 |
| B DIRECTING AND IMPLEMENTING | 3 | 9 | 5 | 20 |
| C INSPECTING AND EVALUATING | 5 | 8 | 1 | 11 |
| D TRAINING | 2 | 20 | 2 | 7 |
| E PERFORMING GENERAL ADMINISTRATIVE AND SUPPLY FUNCTIONS | 6 | 5 | 18 | 10 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 37 | 14 | 0 | 0 |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 14 | 6 | 7 | 0 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 12 | 13 | 1 | 0 |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 9 | 5 | 0 | 0 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | 6 | 1 | 0 | 0 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 1 | 8 | 56 | 35 |

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

| DUTIES | QUALITY ASSURANCE JOB (STG117) | EXPEDITER JOB (STG107) | SUPERVISOR JOB (STG354) | MANAGER JOB (STG233) | TOOLS AND EQUIPMENT JOB (STG96) |
|--|--------------------------------|------------------------|-------------------------|----------------------|---------------------------------|
| A ORGANIZING AND PLANNING | 8 | 22 | 16 | 24 | 11 |
| B DIRECTING AND IMPLEMENTING | 7 | 36 | 22 | 19 | 12 |
| C INSPECTING AND EVALUATING | 25 | 15 | 21 | 16 | 7 |
| D TRAINING | 4 | 2 | 11 | 14 | 1 |
| E PERFORMING GENERAL ADMINISTRATIVE AND SUPPLY FUNCTIONS | 12 | 4 | 7 | 10 | 65 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 11 | 13 | 4 | * | * |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 24 | 3 | 2 | * | 1 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 1 | 0 | 1 | 0 | * |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 1 | 0 | * | 0 | 0 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | * | * | * | 0 | 0 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 7 | 5 | 16 | 17 | 3 |

* Denotes less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

| NUMBER IN GROUP | PERCENT OF SAMPLE | F-15 ATTACK CONTROL SYSTEMS JOB | F-111 ATTACK CONTROL SYSTEMS JOB | COMMUNICATION, NAVIGATION, AND PENETRATION AIDS JOB | INSTRUMENT AND FLIGHT CONTROL SYSTEMS JOB | MULTI-SYSTEM SPECIALTY JOB |
|-----------------------------------|-------------------|---------------------------------------|--|--|---|-------------------------------|
| | | 194 | 16 | 74 | 14 | 171 |
| DAFSC DISTRIBUTION: | | | | | | |
| 2A331A | 56% | 46% | 0% | 0% | 0% | 2% |
| 2A331B | 1% | 2% | 0% | 40% | 40% | 2% |
| 2A331C | 4% | 0% | 48% | 0% | 0% | 1% |
| 2A351A | 34% | 47% | 1% | 1% | 1% | 27% |
| 2A351B | 1% | 0% | 1% | 52% | 52% | 22% |
| 2A351C | 1% | 0% | 47% | 1% | 1% | 17% |
| 2A371 | 3% | 5% | 3% | 6% | 6% | 29% |
| 2A390 | 0% | 0% | 0% | 0% | 0% | 0% |
| PAYGRADE DISTRIBUTION: | | | | | | |
| E-1 to E-3 | 64% | 49% | 48% | 48% | 39% | 5% |
| E-4 | 28% | 31% | 39% | 39% | 49% | 22% |
| E-5 | 6% | 19% | 11% | 8% | 8% | 47% |
| E-6 | 2% | 1% | 2% | 3% | 3% | 25% |
| E-7 | 0% | 0% | 0% | 1% | 1% | 1% |
| E-8 | 0% | 0% | 0% | 0% | 0% | 0% |
| Average number of tasks performed | 112 | 101 | 118 | 151 | 247 | |
| Average months TAFMS | 38 | 55 | 52 | 57 | 123 | |
| Percent in first enlistment | 78% | 54% | 59% | 54% | 10% | |
| Percent supervising others | 18% | 32% | 25% | 26% | 81% | |

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

| NUMBER IN GROUP | PERCENT OF SAMPLE | TEST SQUADRON JOB | FTD INSTRUCTOR JOB | DEBRIEFER JOB | MAINTENANCE OPERATIONS CONTROL CENTER COORDINATORS JOB |
|--|-------------------|-------------------|--------------------|---------------|--|
| | | 5 | 9 | 13 | 13 |
| DAFSC DISTRIBUTION: | | | | | |
| 2A331A | 0% | 0% | 0% | 8% | 0% |
| 2A331B | 0% | 0% | 0% | 0% | 0% |
| 2A331C | 0% | 0% | 0% | 8% | 0% |
| 2A351A | 0% | 0% | 0% | 38% | 16% |
| 2A351B | 0% | 11% | 8% | 0% | 0% |
| 2A351C | 0% | 0% | 30% | 46% | 0% |
| 2A371 | 100% | 89% | 8% | 38% | 0% |
| 2A390 | 0% | 0% | 0% | 0% | 0% |
| PAYGRADE DISTRIBUTION: | | | | | |
| E-1 to E-3 | 0% | 0% | 16% | 0% | 0% |
| E-4 | 0% | 0% | 62% | 15% | 15% |
| E-5 | 40% | 22% | 15% | 38% | 38% |
| E-6 | 40% | 56% | 7% | 38% | 38% |
| E-7 | 20% | 22% | 0% | 9% | 9% |
| E-8 | 0% | 0% | 0% | 0% | 0% |
| Average number of tasks performed | | | | | |
| Average months TAPMS | 184 | 104 | 16 | 22 | 22 |
| Percent in first enlistment | 185 | 136 | 69 | 151 | 151 |
| Percent supervising others | 0% | 0% | 38% | 0% | 0% |
| | 20% | 78% | 15% | 69% | 69% |

TABLE 4 (CONTINUED)

SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

| NUMBER IN GROUP | QUALITY ASSURANCE JOB | EXPEDITER JOB | SUPERVISOR JOB | MANAGER JOB | TOOLS AND EQUIPMENT JOB |
|-----------------------------------|-----------------------|---------------|----------------|-------------|-------------------------|
| PERCENT OF SAMPLE | 1% | 2% | 1% | 1% | 2% |
| DAFSC DISTRIBUTION: | | | | | |
| 2A331A | 0% | 0% | 0% | 0% | 0% |
| 2A331B | 0% | 0% | 0% | 0% | 0% |
| 2A331C | 0% | 0% | 0% | 0% | 5% |
| 2A351A | 10% | 5% | 0% | 0% | 43% |
| 2A351B | 0% | 0% | 0% | 17% | 9% |
| 2A351C | 0% | 5% | 0% | 0% | 13% |
| 2A371 | 90% | 85% | 100% | 83% | 30% |
| 2A390 | 0% | 5% | 0% | 0% | 0% |
| PAYGRADE DISTRIBUTION: | | | | | |
| E-1 to E-3 | 0% | 0% | 0% | 0% | 4% |
| E-4 | 0% | 0% | 0% | 17% | 52% |
| E-5 | 30% | 10% | 0% | 0% | 18% |
| E-6 | 40% | 30% | 19% | 50% | 22% |
| E-7 | 30% | 55% | 81% | 33% | 4% |
| E-8 | 0% | 5% | 0% | 0% | 0% |
| Average number of tasks performed | 48 | 38 | 85 | 84 | 27 |
| Average months TAFMS | 162 | 193 | 219 | 173 | 121 |
| Percent in first enlistment | 0% | 0% | 0% | 0% | 21% |
| Percent supervising others | 60% | 85% | 100% | 50% | 52% |

B. F-111 Attack Control Systems Job (STG144). The 74 members of this job make up 6 percent of the survey sample. They perform an average of 101 tasks, which are quite similar to those performed by F-15 attack control systems personnel. Likewise, 38 percent of their time is spent in Duty H (Maintaining Attack Control Systems), as shown in Table 3. The majority of these tasks pertain to removing, replacing, troubleshooting, inspecting, and operationally checking numerous attack control systems components. Representative tasks for this job include:

- troubleshoot TFR systems
- operationally or BIT check TFRs
- troubleshoot radar altimeter systems
- operationally check radar altimeters
- confidence test and BIT computer complexes
- operationally check optical sight systems
- remove or replace tracking handle LRUs
- troubleshoot tracking handle

Personnel working in the F-111 Attack Control Systems Job are more experienced than their F-15 counterparts, as reflected by an average of 4 years, 7 months TAFMS. Table 4 shows that only 54 percent are in their first enlistment. Most members of this job have a DAFSC of 2A331A or 2A351A, totaling 93 percent. Forty-nine percent are in the paygrades E-1 through E-3.

C. Communication, Navigation, and Penetration Aids Job (STG136). The 171 members of this job represent 14 percent of the sample. They perform an average of 118 tasks. Table 3 shows that 44 percent of their time is spent working in Duty J (Maintaining Communications, Navigation, and Penetration Aids Systems). The majority of these tasks pertain to removing, replacing, troubleshooting, inspecting, and operationally checking numerous communication and navigation components. Representative tasks for this job include:

- remove or replace AG/IFF transponder system LRUs
- set mode 2 codes in AG/IFF transponder systems
- operationally or BIT check ECM systems
- remove or replace ECM system LRUs
- troubleshoot ECM systems
- troubleshoot secure voice crypto equipment
- reprogram CMDS system LRUs
- remove or replace EWWS LRUs

Personnel working in the Communication, Navigation, and Penetration Aids Job have an average of 4 years, 4 months TAFMS, and 59 percent are in their first enlistment (see Table 4). Ninety-six percent of the members of this have a DAFSC of either 2A331C or 2A351C. Forty-eight percent are in the paygrades E-1 through E-3.

D. Instrument and Flight Control Systems Job (STG131). The 144 members of this job make up 12 percent of the survey sample. They perform an average of 151 tasks. Forty-eight percent of their time is spent working on tasks in Duty I (Maintaining Instrument and Flight Control Systems), as shown in Table 3. The majority of these tasks pertain to removing, replacing, troubleshooting, inspecting, and operationally checking numerous instrument and flight control systems components. Representative tasks for this job include:

- adjust primary or standby instrument system components
- troubleshoot AICSS
- remove or replace primary flight control or trim system LRUs
- troubleshoot flight control trim systems
- operationally check airborne signal data recording systems
- troubleshoot manual flight control systems
- troubleshoot turbine inlet temperature indicating systems
- adjust automatic flight control or trim system components

Personnel working in the Instrument and Flight Control Systems Job average 4 years, 9 months TAFMS, and 54 percent are in their first enlistment. The majority of members in this job have a DAFSC of 2A331B or 2A351B (92 percent), as reflected by Table 4. Eighty-eight percent of the incumbents of this job have a paygrade of E-4 or below.

E. Multi-System Specialty Job (STG142). The 291 members of this job make up 25 percent of the survey sample. They perform the greatest number of tasks among all the groups, averaging 247. As shown in Table 3, 53 percent of their time is spent working in Duties H (Maintaining Attack Control Systems), I (Maintaining Instrument and Flight Control Systems), and J (Maintaining Communication, Navigation, and Penetration Aids Systems). The majority of their tasks pertain to removing, replacing, troubleshooting, inspecting, and operationally checking numerous system components on attack control; instrument and flight control systems; and communication, navigation, and penetration aids. Representative tasks for this job include:

- debrief aircrews
- operationally or BIT check IG systems
- defer equipment maintenance records in CAMS
- remove or replace right-hand throttle grips
- troubleshoot right-hand throttle grips

- troubleshoot control stick grips
- remove or replace BIT system LRUs
- troubleshoot IBSs

Personnel working in the Multi-System Specialty Job average 10 years, 3 months TAFMS, and only 10 percent are in their first enlistment. Table 4 shows 66 percent of the members of this job work at the 5-skill level and another 29 percent work at the 7-skill level. Forty-seven percent of the incumbents for this job are in paygrade E-5.

F. Test Squadron Job (STG128). The five members of this job make up 1 percent of the survey sample. They operationally test and evaluate aircraft to ensure readiness. These members perform an average of 184 tasks, the majority of which pertain to various functions of general aircraft handling, as reflected in Table 3. Representative tasks for this job include:

- accomplish end-of-runway checks
- clean aircraft, other than washing
- single-point or multipoint refuel or defuel aircraft
- assist in removing or installing aircraft engines
- complete aircraft postflight inspection checklists
- determine serviceability of aircraft tires
- operationally check aircraft lighting systems
- inspect aircraft pneumatic systems

Personnel working in the test squadron job average 15 years, 5 months TAFMS, and none are in their first enlistment. All members of this job are at the 7-skill level. Forty percent of the incumbents have paygrades E-5 and E-6, as can be seen in Table 4.

II. FIELD TRAINING DETACHMENT (FTD) INSTRUCTOR JOB (STG139). The 9 members of this job make up 1 percent of the survey sample. They perform an average of 104 tasks, and Table 3 shows that the majority of their time is spent training others. Representative tasks for this job include:

- conduct FTD course classroom training
- maintain TO files
- administer or score tests
- develop FTD course training materials
- assign FTD course instructors

- write test questions
- inspect aircraft egress systems
- operationally check remote map reader systems

As shown in Table 4, personnel working as FTD instructors average 13 years TAFMS, and none of them are in their first enlistment. Eighty-nine percent of these personnel are at the 7-skill level. Fifty-six percent of the incumbents have the paygrade E-6.

III. DEBRIEFER JOB (STG127). The 13 members working in the debriefing functional area make up 1 percent of the survey sample. They perform an average of 16 tasks. Despite the fact that 56 percent of their time is spent working on core automated maintenance systems (CAMS), as shown in Table 3, these incumbents all claim "debriefer" as their job title. Representative tasks for this job include:

- maintain debriefing forms
- debrief aircrews
- correct CAMS errors noted during daily verification process
- correct CAMS work unit codes
- change CAMS performing workcenter codes
- verify accuracy of CAMS daily inputs

Personnel working as Debriefers average 5 years, 9 months TAFMS, and 38 percent are in their first enlistment. Sixty-eight percent have a DAFSC of 2A351A or 2A351C, and only 8 percent work on instrument and flight control systems, according to Table 4. Sixty-two percent of the incumbents of this job are at a paygrade of E-4.

IV. MAINTENANCE OPERATIONS CONTROL CENTER COORDINATOR JOB (STG055). The 13 members of this job make up 1 percent of the survey sample. They perform an average of 22 tasks, and most of their time is spent planning and implementing aircraft maintenance from the maintenance operations control center (see Table 3). Representative tasks for this job include:

- coordinate maintenance work with appropriate personnel or agencies
- interpret policies, directives, or procedures for subordinates
- analyze CAMS data
- access CAMS menus and data screens

Personnel working as maintenance coordinators average 12 years, 7 months TAFMS, and none are in their first enlistment. Table 4 shows that 46 percent of these people have a DAFSC of 2A351C and 76 percent of the incumbents of this job are in paygrades E-5 and E-6.

V. QUALITY ASSURANCE JOB (STG117). The 10 members of this job make up 1 percent of the survey sample. They perform an average of 48 tasks, and most of their time is spent inspecting and evaluating aircraft components and procedures, as reflected in Table 3. Representative tasks for this job include:

- inspect TO improvement reports
- investigate accidents or incidents
- evaluate personnel for compliance with performance standards or TOs
- develop inspection procedures
- develop quality assurance programs
- evaluate suggestions

Personnel working in the Quality Assurance Job average 13 years, 6 months TAFMS, and none are in their first enlistment. Ninety percent of these people are at the 7-skill level and 70 percent of the incumbents of this job are in paygrades E-6 and E-7, as seen in Table 4.

VI. MANAGEMENT CLUSTER (STG044). The 89 members of this cluster represent 8 percent of the total survey sample, divided among three jobs. These are the core duties performed by senior NCOs in the Avionic Systems career ladder. Personnel within this cluster perform an average of 53 tasks.

A. Expediter Job (STG107). The 20 members of this job make up 2 percent of the survey sample. They perform an average of 38 tasks, which takes up the majority of their duty time with the directing and implementing of maintenance activities and work assignments (see Table 3). Representative tasks for this job include:

- direct flightline maintenance activity
- adjust daily maintenance plans to meet operational commitments
- supervise F-15/F-111 Avionic Systems Apprentices; Comm, Nav, and Pen Aids (AFSC 2A331C)
- supervise F-15/F-111 Avionic Systems Apprentices; Instruments and Flight Controls (AFSC 2A331B)
- supervise F-15/F-111 Avionic Systems Journeymen; Comm, Nav, and Pen Aids (AFSC 2A351C)

- supervise F-15/F-111 Avionic Systems Journeymen; Instruments and Flight Controls (AFSC 2A351B)
- supervise F-15/F-111 Avionic Systems Journeymen; Attack Control (AFSC 2A351A)

Table 4 shows that personnel working the Expediter Job have an average of 16 years, 3 months TAFMS. Most (85 percent) are at the 7-skill level and 55 percent have achieved the paygrade of E-7

B. Supervisor Job (STG354). The 16 members of this job make up 1 percent of the survey sample. They perform an average of 85 tasks which, as Table 3 shows, mostly deal with the supervision and evaluation of junior NCOs. Representative tasks for this job include:

- conduct CAMS delayed discrepancies inquiries prior to, during, or after scheduling maintenance
- assign OJT trainers
- conduct CAMS training status inquiries
- indorse EPRs
- evaluate causes of mission operational discrepancies
- analyze workload requirements
- assign personnel to duty positions
- establish work methods or controls

Personnel working in the Supervisor Job have an average of 18 years, 3 months TAFMS (see Table 4). All of the incumbents in this job have a DAFSC of 2A371. Eighty-one percent have achieved the paygrade of E-7. Every member of this job supervises other personnel.

C. Manager Job (STG233). The 6 members of this job make up 1 percent of the survey sample. They perform an average of 84 tasks, spending 24 percent of their time organizing and planning procedures, programs, and assignments in the AFSC 2A3X1A/B/C career ladder, as shown in Table 3. Representative tasks for this job include:

- determine logistics requirements, such as space, personnel, and equipment
- conduct CAMS training
- determine CAMS training requirements
- identify problem areas using deficiency or service reports
- plan safety or security programs

- develop organizational or functional charts
- direct development of status indicators, such as boards, graphs, or charts
- write staff studies, surveys, or special reports, other than training reports

Personnel working in the Manager Job have an average of 14 years, 5 months. Table 4 reflects that most members of this job (83 percent) are at the 7-skill level and 50 percent have a paygrade of E-6.

VII. TOOLS AND EQUIPMENT JOB (STG096). The 23 members of this job make up 2 percent of the survey sample. They perform an average of 27 tasks, which deal with administrative and logistic control of all tools and equipment (65 percent of their time spent). Representative tasks for this job include:

- inventory tools, such as CTKs
- issue tools, equipment, or supplies
- inspect tools or equipment
- maintain tool cribs
- maintain ECLs
- perform security checks of tool cribs, hangars, or vehicles
- inventory equipment or supplies
- process tools or equipment for shipment or deployment

Personnel working in the Tools and Equipment Job have an average of 10 years, 1 month TAFMS, and 21 percent are in their first enlistment. Table 4 shows that most members of this job have a DAFSC of 2A351A and 52 percent have a paygrade of E-4.

Comparison of Current Group Descriptions to Previous Studies

The results of the specialty job analysis were compared to the previous Avionic Systems OSRs: AFSC 452X1A/B/C, F-15 Avionic Systems Career Ladder, dated April 1990, and AFSC 452X3A/B/C, F/FB-111 Avionic Systems Career Ladder, dated August 1990. Table 5 lists the major clusters and jobs identified in the current report and their equivalents from the 1990 reports. A comparison of the jobs identified in the current survey against those jobs identified in the 1990 OSRs showed a very similar job structure across the three studies.

TABLE 5

JOB COMPARISONS BETWEEN CURRENT OSR AND 1990 OSRs

| CURRENT 2A3X1 OSR | 1990 452X1 OSR | 1990 452X3 OSR |
|---|---|---|
| Flightline Maintenance Cluster | | |
| - F-15 Attack Control Systems Job | Attack Control Systems Cluster | |
| - F-111 Attack Control Systems Job | | Attack Control Systems Cluster |
| - Communication, Navigation, and Penetration Aids Job | Communication, Navigation, and Penetration Aids Systems Cluster | Communication, Navigation, and Penetration Aids Systems Cluster |
| - Instrument and Flight Control Systems Job | Instrument and Flight Control Systems Cluster | Instrument and Flight Control Systems Cluster |
| - Multi-system Specialty Job | Multisystems Cluster | Avionic Technicians Cluster |
| - Test Squadron Job | | <i>Not identified</i> |
| FTD Instructor Job | Avionic Systems Training Cluster | Training IJT |
| Debriefer Job | Debriefers IJT | Debriefers IJT |
| Maintenance Operations Control Center Coordinator Job | Controllers IJT | <i>Not identified</i> |
| Quality Assurance Job | Quality Assurance Inspectors IJT | Quality Assurance Inspectors IJT |
| Management Cluster | | |
| - Expediter Job | Flightline Expeditors IJT | <i>Not identified</i> |
| | | Supervisors Cluster |
| - Supervisor Job | Avionics Systems Supervisors Cluster | <i>Not identified</i> |
| - Manager Job | | Logistics Support Cluster |
| Tools and Equipment Job | Logistics Support Cluster | <i>Not identified</i> |
| | Preventive Maintenance Cluster | |

Summary

In summary, structure analysis reveals the F-15/F-111 Avionic Systems career ladder to be quite heterogeneous, due to the different avionic systems. Eighty-five percent of the survey sample are associated with working on specific avionic systems, with the remaining 15 percent working in supervisory, training, and support jobs. The merger of the previous AFSCs 452X1 and 452X3 is supported by the survey data, with 25 percent of the personnel working on multi-systems.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. DAFSC analysis examines differences in tasks performed between skill levels. This information may then be used to evaluate how well career ladder documents, such as the Specialty Descriptions, reflect what career ladder personnel are actually doing in the field.

The distribution of AFSC 2A3X1A/B/C skill-level groups across career ladder clusters and jobs is displayed in Table 6. As shown, very high percentages of members from DAFSCs 2A331A, 2A331B, and 2A331C are performing the core jobs of their respective shreds within the career ladder. Approximately one-third of the personnel in DAFSCs 2A351A, 2A351B, and 2A351C work with all three avionic systems, and can be found in the Multi-System Specialty job. As personnel progress through the career ladder, they begin to move into traditional management and supervisory roles. This represents a typical career progression pattern.

Table 7 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. As expected, 3- and 5-skill level groups are equally involved in performing general aircraft handling and avionic systems maintenance functions. Seven- and 9-skill level members perform more supervisory and management duties. Specific skill-level group discussions are presented below.

Skill-Level Descriptions

DAFSC 2A331A. Three-skill level members of this shred perform an average of 92 tasks and most hold the grade of E-3. Table 6 shows that 67 percent of the 171 members in this group work in the F-15 Attack Control Systems Job. Thirty-six percent of their job time is spent maintaining attack control systems (see Table 7). Table 8 lists representative tasks these members perform.

TABLE 6

DISTRIBUTION OF MEMBERS BY DAFSC ACROSS CAREER LADDER JOBS (PERCENT)

| JOB | 2A331A (N=171) | 2A331B (N=77) | 2A331C (N=112) | 2A351A (N=220) | 2A351B (N=154) | 2A351C (N=164) | 2A371 (N=284) | 2A390 (N=3) |
|---|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|------------------|----------------|
| Flightline Maintenance Cluster | 91 | 84 | 88 | 85 | 95 | 87 | 41 | 0 |
| -F-15 Attack Control Systems Job | 67 | 1 | 6 | 30 | 1 | 1 | 2 | 0 |
| -F-111 Attack Control Systems Job | 20 | 1 | 0 | 16 | 0 | 0 | 1 | 0 |
| -Communication, Navigation, and Penetration Aids Job | 0 | 0 | 74 | 1 | 1 | 49 | 2 | 0 |
| -Instrument and Flight Control Systems Job | 0 | 74 | 0 | 1 | 49 | 1 | 3 | 0 |
| -Multi-system Specialty Job | 4 | 8 | 3 | 36 | 40 | 31 | 30 | 0 |
| -Test Squadron Job | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| FTD Instructor Job | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 |
| Debriefer Job | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 0 |
| Maintenance Operations Control Center Coordinator Job | 0 | 0 | 0 | 1 | 0 | 4 | 2 | 0 |
| Quality Assurance Job | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 |
| Management Cluster | 0 | 0 | 0 | 3 | 1 | 1 | 28 | 100 |
| -Expediter Job | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 33 |
| -Supervisor Job | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 |
| -Manager Job | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 |
| Tools and Equipment Job | 0 | 0 | 1 | 5 | 1 | 2 | 3 | 0 |
| Ungrouped | 8 | 16 | 10 | 3 | 1 | 4 | 19 | 0 |

TABLE 7

TIME SPENT ON DUTIES BY MEMBERS OF DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

| DUTIES | 2A331A (N=171) | 2A331B (N=77) | 2A331C (N=112) | 2A351A (N=220) |
|--|-------------------|------------------|-------------------|-------------------|
| A ORGANIZING AND PLANNING | 1 | 1 | 1 | 3 |
| B DIRECTING AND IMPLEMENTING | 1 | 1 | 1 | 4 |
| C INSPECTING AND EVALUATING | 1 | 1 | 1 | 3 |
| D TRAINING | 1 | 1 | 1 | 3 |
| E PERFORMING GENERAL ADMINISTRATION AND SUPPLY FUNCTIONS | 2 | 1 | 3 | 7 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 25 | 19 | 20 | 15 |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 20 | 14 | 17 | 15 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 36 | 6 | 7 | 27 |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 2 | 46 | 2 | 7 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | 2 | 2 | 38 | 7 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 9 | 8 | 9 | 9 |

TABLE 7 (CONTINUED)

TIME SPENT ON DUTIES BY MEMBERS OF DAFSC GROUPS
(RELATIVE PERCENT OF JOB TIME)

| DUTIES | 2A351B (N=154) | 2A351C (N=164) | 2A371 (N=284) | 2A390 (N=3) |
|--|-------------------|-------------------|------------------|----------------|
| A ORGANIZING AND PLANNING | 2 | 4 | 13 | 26 |
| B DIRECTING AND IMPLEMENTING | 2 | 4 | 14 | 32 |
| C INSPECTING AND EVALUATING | 2 | 3 | 13 | 23 |
| D TRAINING | 2 | 2 | 7 | 7 |
| E PERFORMING GENERAL ADMINISTRATION AND SUPPLY FUNCTIONS | 3 | 5 | 7 | 8 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 17 | 14 | 9 | 1 |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 13 | 15 | 8 | 1 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 9 | 8 | 7 | 0 |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 35 | 6 | 7 | 0 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | 7 | 30 | 6 | 0 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 8 | 9 | 9 | 2 |

TABLE 8
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A331A PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=171)</u> |
|---|---|
| F162 Connect or disconnect aircraft external cooling air units | 93 |
| F163 Connect or disconnect aircraft external power | 93 |
| H308 Operationally or BIT check radar systems | 93 |
| F181 Open or close canopies | 91 |
| F180 Open or close airframe components | 89 |
| F233 Walk wings or tails during aircraft towing operations | 88 |
| F182 Open or close weapons bays, radomes, or pallets | 87 |
| G243 Inspect waveguides | 87 |
| H305 Operationally or BIT check INSs | 87 |
| H336 Remove or replace radar system LRUs | 85 |
| F186 Position or remove aircraft chocks or safety pins | 85 |
| K560 Access CAMS menus and data screens | 84 |
| G256 Safety wire components | 84 |
| F234 Wash aircraft | 84 |
| G249 Remove or replace waveguides | 84 |
| G239 Inspect coaxial cables and connectors | 83 |
| H327 Remove or replace INS LRUs | 82 |
| G241 Inspect multipin connectors | 81 |
| G237 Inspect aircraft wiring | 81 |
| G262 Troubleshoot aircraft wiring | 80 |
| K581 Load LRU part number or serial numbers in CAMS | 78 |
| G242 Inspect triaxial cables and connectors | 78 |
| H357 Troubleshoot INSs | 77 |
| G260 Trace wiring, system, or interface diagrams | 77 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 76 |
| H303 Operationally or BIT check HUD systems | 75 |
| H324 Remove or replace HUD system LRUs | 75 |
| G265 Troubleshoot multipin connectors | 75 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 74 |
| F176 Launch or recover aircraft | 73 |
| F159 Complete aircraft safe-for-maintenance checks | 73 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 72 |
| G238 Inspect chafing problem areas | 72 |
| G235 Analyze avionics status panel latch data | 69 |
| F191 Preuse inspect aircraft external cooling air units | 67 |
| H354 Troubleshoot HUD systems | 66 |
| H315 Remove or replace CC system LRUs | 66 |
| H311 Pressurize and leak check radar systems | 66 |
| H341 Remove or replace video recording system LRUs | 61 |
| H300 Operationally check video recording systems | 61 |
| G255 Research technical orders | 60 |
| F166 Ground aircraft | 59 |
| K561 Analyze CAMS data | 56 |

DAFSC 2A331B. There are 77 members at the 3-skill level for the B shred, who perform an average of 118 tasks. More than half of these members (55 percent) are E-3s. Seventy-four percent of these airmen are members of the Instrument and Flight Control Systems Job (see Table 6). DAFSC 2A331B members spend 46 percent of their time maintaining instrument and flight control systems (see Table 7). Table 9 lists representative tasks for these incumbents.

DAFSC 2A331C. Three-skill level members of this shred perform an average of 102 tasks and most hold the grade of E-3. Table 6 shows that 74 percent of the 112 members in this group are in the Communication, Navigation, and Penetration Aids Job. Thirty-nine percent of their job time is spent maintaining communication, navigation, and penetration aids systems (see Table 7). Table 10 lists representative tasks these members perform.

DAFSC 2A351A. There are 220 members at the 5-skill level for the A shred, who perform an average of 156 tasks. Nearly half of these members (49 percent) are E-4s. Thirty-six percent of these airmen are members of the Multi-System Specialty Job and 30 percent are in the F-15 Attack Control Systems Job (see Table 6). DAFSC 2A351A members spend 27 percent of their time maintaining the attack control systems (see Table 7). Table 11 lists representative tasks for these incumbents.

DAFSC 2A351B. Five-skill level members of this shred perform an average of 191 tasks and most hold the grade of E-4. Table 6 shows that 49 percent of the 154 members in this group are in the Instrument and Flight Control Systems Job and 40 percent work in the Multi-System Specialty Job. Thirty-six percent of their job time is spent maintaining instrument and flight control systems (see Table 7). Table 12 lists representative tasks these members perform.

DAFSC 2A351C. There are 164 members at the 5-skill level for the C shred. They perform an average of 150 tasks. More than half of these members (54 percent) are E-4s. Forty-nine percent of these airmen are members of the Communications, Navigation, and Penetration Aids Systems Job, and another 31 percent are in the Multi-System Specialty Job (see Table 6). DAFSC 2A351C members spend 30 percent of their time maintaining communications, navigation, and penetrations aids systems (see Table 7). Table 13 lists representative tasks for these incumbents.

As Tables 11 through 13 show, DAFSC 2A351 personnel for each shred perform tasks very similar to those performed by their 3-skill level counterparts. Tasks which best distinguish 5-skill level personnel from the junior 3-skill level members are presented in Tables 14 through 16. As expected, the key difference between these groups is an emphasis on training and supervisory functions by 5-skill level members. Examples of tasks with the greatest difference in members performing include conducting OJT, conducting performance feedback worksheet sessions, and counseling trainees on training progress.

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A331B PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=77)</u> |
|--|--|
| I390 Operationally and leak check pitot static and standby instrument systems | 92 |
| G262 Troubleshoot aircraft wiring | 92 |
| F163 Connect or disconnect aircraft external power | 91 |
| K560 Access CAMS menus and data screens | 91 |
| I394 Operationally check AFCSs | 91 |
| I393 Operationally check attitude heading reference and instrument systems | 91 |
| G256 Safety wire components | 91 |
| G260 Trace wiring, system, or interface diagrams | 90 |
| I420 Remove or replace attitude heading reference and instrument system LRUs | 88 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 88 |
| F162 Connect or disconnect aircraft external cooling air units | 87 |
| I391 Operationally check air data computer and primary instrument systems | 87 |
| I412 Operationally or BIT check fuel quantity indicating systems | 87 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 84 |
| F233 Walk wings or tails during aircraft towing operations | 84 |
| I407 Operationally check standby attitude indicators | 84 |
| F180 Open or close airframe components | 83 |
| F181 Open or close canopies | 83 |
| I413 Operationally or BIT check HSI systems | 83 |
| G253 Repair aircraft wiring | 83 |
| F186 Position or remove aircraft chocks or safety pins | 82 |
| I411 Operationally or BIT check AICSs | 82 |
| F234 Wash aircraft | 82 |
| I434 Remove or replace pitot static, heater, or instrument system LRUs | 82 |
| I427 Remove or replace fuel flow indicators | 82 |
| G237 Inspect aircraft wiring | 81 |
| I396 Operationally check BIT systems | 81 |
| I415 Remove or replace AFCS LRUs | 79 |
| I403 Operationally check hydraulic pressure indicating systems | 79 |
| K581 Load LRU part numbers or serial numbers in CAMS | 78 |
| I404 Operationally check primary flight control or trim systems | 78 |
| I387 Calibrate fuel quantity indicating systems | 78 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 77 |
| I465 Troubleshoot fuel quantity indicating systems | 77 |
| I417 Remove or replace AIC LRUs | 75 |
| I450 Troubleshoot AFCSs | 75 |
| F176 Launch or recover aircraft | 75 |
| I472 Troubleshoot pitot static, heater, or instrument systems | 75 |
| G235 Analyze ASP latch data | 74 |
| G241 Inspect multipin connectors | 72 |
| G265 Troubleshoot multipin connectors | 72 |
| F159 Complete aircraft safe-for-maintenance checks | 71 |
| F198 Preuse inspect hydraulic test stands or servicing carts | 71 |

TABLE 10
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A331C PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=112)</u> |
|--|---|
| F162 Connect or disconnect aircraft external cooling air units | 92 |
| F180 Open or close airframe components | 89 |
| F163 Connect or disconnect aircraft external power | 89 |
| F159 Complete aircraft safe-for-maintenance checks | 89 |
| K560 Access CAMS menus and data screens | 87 |
| G256 Safety wire components | 84 |
| F181 Open or close canopies | 84 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 83 |
| J492 Operationally or BIT check AA/IFF interrogator systems | 83 |
| G239 Inspect coaxial cables and connectors | 83 |
| J484 Code mode 4 crypto equipment | 82 |
| J509 Remove or replace AA/IFF transponder system LRUs | 82 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 82 |
| J503 Operationally or BIT check RWRs or CRSs | 81 |
| J489 Operationally check intercommunications systems | 81 |
| J557 Troubleshoot UHF communication and audio signal systems | 81 |
| J504 Operationally or BIT check TACAN systems | 81 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 80 |
| F186 Position or remove aircraft chocks or safety pins | 79 |
| K581 Load LRU part numbers or serial numbers in CAMS | 79 |
| F234 Wash aircraft | 79 |
| F233 Walk wings or tails during aircraft towing operations | 79 |
| G241 Inspect multipin connectors | 79 |
| G237 Inspect aircraft wiring | 79 |
| G260 Trace wiring, system, or interface diagrams | 79 |
| J523 Remove or replace RWR, CRS, or TTWS LRUs | 78 |
| J525 Remove or replace TACAN system LRUs | 78 |
| J495 Operationally or BIT check CMDSS | 77 |
| J482 Accomplish end-of-runway mode 4/ RWR checks | 77 |
| G257 Seal or reseal antennas | 77 |
| J539 Troubleshoot AA/IFF interrogator systems | 75 |
| G235 Analyze ASP latch data | 74 |
| J553 Troubleshoot RWRs or CRSs | 71 |
| J511 Remove or replace AG/IFF transponder system LRUs | 66 |
| F176 Launch or recover aircraft | 63 |
| F166 Ground aircraft | 63 |
| J493 Operationally or BIT check AG/IFF interrogator systems | 63 |
| J485 Code secure voice crypto equipment | 62 |
| K561 Analyze CAMS data | 61 |
| G255 Research technical orders | 61 |

TABLE 11
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A351A PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=220)</u> |
|---|---|
| G260 Trace wiring, system, or interface diagrams | 85 |
| H305 Operationally or BIT check INSS | 84 |
| G239 Inspect coaxial cables and connectors | 84 |
| G262 Troubleshoot aircraft wiring | 84 |
| K560 Access CAMS menus and data screens | 83 |
| F163 Connect or disconnect aircraft external power | 83 |
| F162 Connect or disconnect aircraft external cooling air units | 83 |
| G241 Inspect multi-pin connectors | 83 |
| G243 Inspect waveguides | 83 |
| G253 Repair aircraft wiring | 82 |
| H308 Operationally or BIT check radar systems | 81 |
| F181 Open or close canopies | 81 |
| G251 Remove, replace, or repair multi-pin connectors | 81 |
| F180 Open or close airframe components | 80 |
| G256 Safety wire components | 80 |
| H357 Troubleshoot INSS | 80 |
| H327 Remove or replace INS LRUs | 80 |
| G263 Troubleshoot coaxial cables and connectors | 80 |
| G249 Remove or replace waveguides | 80 |
| G250 Remove, replace, or repair coaxial connectors | 80 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 79 |
| H336 Remove or replace radar system LRUs | 79 |
| G237 Inspect aircraft wiring | 79 |
| G265 Troubleshoot multi-pin connectors | 79 |
| G247 Remove or replace coaxial cables | 79 |
| F182 Open or close weapons bays, radomes, or pallets | 78 |
| G258 Solder or crimp connections on aircraft wiring | 78 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 77 |
| G238 Inspect chafing problem areas | 76 |
| F233 Walk wings or tails during aircraft towing operations | 76 |
| G242 Inspect triaxial cables and connectors | 75 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 72 |
| K581 Load LRU part numbers or serial numbers in CAMS | 71 |
| F186 Position or remove aircraft chocks or safety pins | 70 |
| F159 Complete aircraft safe-for-maintenance checks | 69 |
| F191 Preuse inspect aircraft external cooling air units | 68 |
| E120 Inventory tools | 65 |
| E118 Inspect tools or equipment | 63 |
| H303 Operationally or BIT check HUD systems | 63 |
| B49 Supervise F-15/F-111 Avionic Systems Apprentices, Attack Control (2A331A) | 60 |
| G236 Debrief crews | 58 |
| K561 Analyze CAMS data | 51 |
| D88 Conduct OJT | 51 |

TABLE 12
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A351B PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=154)</u> |
|---|---|
| G262 Troubleshoot aircraft wiring | 95 |
| F163 Connect or disconnect aircraft external power | 94 |
| G260 Trace wiring, system, or interface diagrams | 94 |
| F162 Connect or disconnect aircraft external cooling air units | 94 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 94 |
| F181 Open or close canopies | 92 |
| G237 Inspect aircraft wiring | 92 |
| G253 Repair aircraft wiring | 92 |
| G256 Safety wire components | 92 |
| F180 Open or close airframe components | 91 |
| I394 Operationally check AFCSs | 90 |
| I390 Operationally and leak check pitot static and standby instrument systems | 90 |
| I391 Operationally check air data computer and primary instrument systems | 90 |
| I393 Operationally check attitude heading reference and instrument systems | 90 |
| I453 Troubleshoot air data computer and primary instrument systems | 90 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 90 |
| G259 Splice aircraft wiring | 89 |
| I415 Remove or replace AFCS LRUs | 88 |
| G241 Inspect multipin connectors | 88 |
| I387 Calibrate fuel quantity indicating systems | 88 |
| I465 Troubleshoot fuel quantity indicating systems | 87 |
| G265 Troubleshoot multipin connectors | 87 |
| F233 Walk wings or tails during aircraft towing operations | 87 |
| K560 Access CAMS menus and data screens | 86 |
| F159 Complete aircraft safe-for-maintenance checks | 86 |
| F186 Position or remove aircraft chocks or safety pins | 86 |
| F166 Ground aircraft | 86 |
| I428 Remove or replace fuel quantity indicating system LRUs | 86 |
| I420 Remove or replace attitude heading reference and instrument system LRUs | 86 |
| I472 Troubleshoot pitot static, heater, or instrument systems | 86 |
| G258 Solder or crimp connections on aircraft wiring | 86 |
| I434 Remove or replace pitot static, heater, or instrument system LRUs | 86 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 85 |
| I450 Troubleshoot AFCSs | 85 |
| I455 Troubleshoot attitude heading reference and instrument systems | 85 |
| I404 Operationally check primary flight control or trim systems | 83 |
| F198 Preuse inspect hydraulic test stands or servicing carts | 82 |
| F222 Service aircraft hydraulic systems | 82 |
| I412 Operationally or BIT check fuel quantity indicating systems | 81 |
| K581 Load LRU part numbers or serial numbers in CAMS | 75 |
| G255 Research technical orders | 71 |
| E120 Inventory tools | 68 |
| E118 Inspect tools or equipment | 66 |

TABLE 13
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A351C PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=164)</u> |
|--|---|
| K560 Access CAMS menus and data screens | 88 |
| F163 Connect or disconnect aircraft external power | 87 |
| G256 Safety wire components | 87 |
| F162 Connect or disconnect aircraft external cooling air units | 87 |
| G260 Trace wiring, system, or interface diagrams | 85 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 84 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 84 |
| J489 Operationally check intercommunications systems | 84 |
| G237 Inspect aircraft wiring | 84 |
| G257 Seal or reseal antennas | 83 |
| G262 Troubleshoot aircraft wiring | 83 |
| G253 Repair aircraft wiring | 83 |
| F180 Open or close airframe components | 82 |
| F181 Open or close canopies | 82 |
| J525 Remove or replace TACAN system LRUs | 82 |
| J504 Operationally or BIT check TACAN systems | 82 |
| G258 Solder or crimp connections on aircraft wiring | 82 |
| J557 Troubleshoot UHF communication and audio signal systems | 81 |
| G239 Inspect coaxial cables and connectors | 81 |
| G263 Troubleshoot coaxial cables and connectors | 81 |
| I484 Code mode 4 crypto equipment | 80 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 79 |
| J551 Troubleshoot intercommunication systems | 79 |
| F233 Walk wings or tails during aircraft towing operations | 78 |
| I495 Operationally or BIT check CMDSS | 78 |
| G241 Inspect multipin connectors | 77 |
| J503 Operationally or BIT check RWRs or CRSs | 76 |
| J521 Remove or replace intercommunications system LRUs | 76 |
| J553 Troubleshoot RWRs or CRSs | 74 |
| K581 Load LRU part numbers or serial numbers in CAMS | 73 |
| J523 Remove or replace RWR, CRS, or TTWS LRUs | 73 |
| J511 Remove or replace AG/IFF transponder system LRUs | 73 |
| F159 Complete aircraft safe-for-maintenance checks | 72 |
| J493 Operationally or BIT check AG/IFF interrogator systems | 72 |
| J496 Operationally or BiT check ECM systems | 68 |
| J514 Remove or replace ECM system LRUs | 65 |
| I485 Code secure voice crypto equipment | 64 |
| G236 Debrief aircrews | 63 |
| E120 Inventory tools | 59 |
| A1 Assign maintenance or repair work | 55 |
| K561 Analyze CAMS data | 52 |
| E118 Inspect tools or equipment | 51 |

TABLE 14

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A331A AND DAFSC 2A351A PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A331A (N=171) | 2A351A (N=220) | DIFFERENCE |
|---|-------------------|-------------------|------------|
| F234 Wash aircraft | 84 | 43 | 41 |
| F176 Launch or recover aircraft | 73 | 50 | 23 |
| J504 Operationally or BIT check TACAN systems | 9 | 40 | -31 |
| J525 Remove or replace TACAN system LRUs | 9 | 40 | -31 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 15 | 46 | -31 |
| J420 Remove or replace attitude heading reference and instrument system LRUs | 8 | 39 | -31 |
| J501 Operationally or BIT check IBSS | 4 | 36 | -32 |
| J415 Remove or replace AFCS LRUs | 9 | 41 | -32 |
| I393 Operationally check attitude heading reference and instrument systems | 6 | 38 | -32 |
| I450 Troubleshoot AFCSs | 5 | 36 | -32 |
| C76 Inspect personnel for compliance with military standards | 1 | 34 | -33 |
| B53 Supervise F-15/F-111 Avionic Systems Journeymen, Attack Control (2A351A) | 1 | 34 | -33 |
| C81 Write recommendations for awards and decorations | 0 | 33 | -33 |
| J551 Troubleshoot intercommunication systems | 4 | 37 | -33 |
| J557 Troubleshoot UHF communication and audio signal systems | 9 | 44 | -35 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 12 | 47 | -35 |
| D104 Maintain training records, charts, or graphs | 6 | 42 | -36 |
| D100 Evaluate personnel for training needs | 0 | 36 | -36 |
| J489 Operationally check intercommunications systems | 13 | 49 | -37 |
| D101 Evaluate progress of trainees | 1 | 40 | -39 |
| A1 Assign maintenance or repair work | 11 | 50 | -39 |
| B30 Counsel personnel on personal or military-related matters | 1 | 42 | -41 |
| D91 Counsel trainees on training progress | 2 | 48 | -46 |
| C60 Conduct performance feedback worksheet sessions | 1 | 48 | -47 |
| D88 Conduct OJT | 4 | 51 | -47 |
| C80 Write EPRs | 0 | 51 | -51 |
| B49 Supervise F-15/F-111 Avionic Systems Apprentices, Attack Control (2A331A) | 5 | 60 | -55 |

TABLE 15

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A331B AND DAFSC 2A351B PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A331B (N=77) | 2A351B (N=154) | DIFFERENCE |
|---|------------------|-------------------|------------|
| F234 Wash aircraft | 82 | 57 | 25 |
| E117 Initiate, annotate, or review aircraft flight or maintenance records | 22 | 55 | -33 |
| J525 Remove or replace TACAN system LRUs | 13 | 47 | -34 |
| J484 Code mode 4 crypto equipment | 10 | 44 | -34 |
| J492 Operationally or BIT check AA/IFF interrogator systems | 13 | 47 | -34 |
| J540 Troubleshoot ADF systems | 1 | 35 | -34 |
| J489 Operationally check intercommunications systems | 16 | 51 | -35 |
| J504 Operationally or BIT check TACAN systems | 10 | 45 | -35 |
| D104 Maintain training records, charts, or graphs | 4 | 40 | -36 |
| J550 Troubleshoot ILSS | 5 | 41 | -36 |
| I478 Troubleshoot tachometer systems | 44 | 80 | -36 |
| I488 Operationally check ILSS | 10 | 46 | -36 |
| F182 Open or close weapons bays, radomes, or pallets | 43 | 79 | -36 |
| J557 Troubleshoot UHF communication and audio signal systems | 9 | 46 | -37 |
| J555 Troubleshoot TACAN systems | 8 | 45 | -37 |
| J551 Troubleshoot intercommunication systems | 3 | 40 | -37 |
| J521 Remove or replace intercommunications system LRUs | 5 | 43 | -38 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 10 | 50 | -40 |
| C263 Troubleshoot coaxial cables and connectors | 32 | 72 | -40 |
| C60 Conduct performance feedback worksheet sessions | 1 | 42 | -41 |
| D101 Evaluate progress of trainees | 3 | 44 | -41 |
| F175 Jack or level aircraft | 19 | 62 | -43 |
| A1 Assign maintenance or repair work | 12 | 56 | -44 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 6 | 51 | -45 |
| B51 Supervise F-15/F-11 Avionic Systems Apprentices, Instruments and Flight Controls (2A331B) | 12 | 59 | -47 |
| D91 Counsel trainees on training progress | 3 | 53 | -50 |
| D88 Conduct OJT | 9 | 61 | -52 |

TABLE 16

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A331C AND DAFSC 2A351C PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A331C (N=112) | 2A351C (N=164) | DIFFERENCE |
|--|-------------------|-------------------|------------|
| F234 Wash aircraft | 79 | 45 | 34 |
| G235 Analyze ASP latch data | 74 | 48 | 26 |
| J492 Operationally or BIT check AA/JIFF interrogator systems | 83 | 60 | 23 |
| I387 Calibrate fuel quantity indicating systems | 5 | 31 | -26 |
| C75 Inspect flightline maintenance actions | 2 | 28 | -26 |
| I438 Remove or replace standby attitude indicators | 4 | 30 | -26 |
| C76 Inspect personnel for compliance with military standards | 1 | 28 | -27 |
| G259 Splice aircraft wiring | 46 | 73 | -27 |
| D100 Evaluate personnel for training needs | 0 | 27 | -27 |
| C81 Write recommendations for awards and decorations | 0 | 27 | -27 |
| I434 Remove or replace pilot static, heater, or instrument system LRUs | 4 | 33 | -29 |
| A15 Establish performance standards for subordinates | 2 | 31 | -29 |
| A19 Plan or schedule work assignments | 2 | 32 | -30 |
| D101 Evaluate progress of trainees | 0 | 32 | -32 |
| D104 Maintain training records, charts, or graphs | 6 | 39 | -33 |
| B54 Supervise F-15/F-111 Avionic Systems Journeymen; Comm, Nav, and Pen Aids (2A351C) | 1 | 34 | -33 |
| A20 Plan or schedule work priorities | 2 | 37 | -35 |
| B30 Counsel personnel on personal or military-related matters | 0 | 38 | -38 |
| D88 Conduct OJT | 7 | 46 | -39 |
| D91 Counsel trainees on training progress | 2 | 41 | -39 |
| C60 Conduct performance feedback worksheet sessions | 1 | 41 | -40 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 5 | 46 | -41 |
| A1 Assign maintenance or repair work | 9 | 55 | -46 |
| B50 Supervise F-15/F-111 Avionic Systems Apprentices; Comm, Nav, and Pen Aids (2A331C) | 5 | 52 | -47 |
| C80 Write EPRs | 1 | 51 | -50 |

DAFSC 2A371. Seven-skill level members perform an average of 117 tasks and most hold the grade of E-6. Table 6 shows that 30 percent of the 284 members in this group perform the Multi-System Specialty Job and 28 percent work in the Management Cluster. Fourteen percent of their job time is spent directing other personnel and implementing policies and procedures (see Table 7). Table 17 lists representative tasks these members perform.

Tasks which best distinguish DAFSC 2A371 personnel from 5-skill level members of each shred are presented in Tables 18 through 20. DAFSC 2A371 members show a marked increase in the amount of supervisory and management tasks performed. Examples of tasks with the greatest difference in members performing include planning or scheduling work assignments, evaluating work schedules, and writing recommendations for awards and decorations.

DAFSC 2A390. There are three members at the 9-skill level. They perform an average of 26 tasks. These members are E-7s and above. All of these senior NCOs are members of the Management Cluster (see Table 6). DAFSC 2A390 members spend 32 percent of their time directing others and implementing standards of performance (see Table 7). Table 21 lists representative tasks for these incumbents. It is important to note that with only three people in the 9-skill level sample, these figures may not be representative of true trends at the 9-skill level.

Tasks which best distinguish DAFSC 2A390 personnel from 7-skill level members are presented in Table 22. Nine-skill level members show a marked increase in the amount of implementation and management tasks performed. Examples of tasks with the greatest difference in members performing include monitoring the hazardous waste programs; inspecting flightline maintenance actions; evaluating the maintenance or use of workspace, equipment, or supplies; and coordinating maintenance work with appropriate personnel or agencies.

Specialty Descriptions Analysis

Survey data were compared to the Specialty Descriptions for AFSC 2A3X1A/B/C F-15/F-111 Avionic Systems Apprentices and Specialists, Technicians, and Superintendents, dated October 1994. The descriptions for the 3-, 5-, 7-, and 9-skill levels and CEM members were accurate, depicting the technical aspects of the job, as well as the supervisory responsibilities previously described in the DAFSC analysis. The descriptions also capture the primary responsibilities of AFSC 2A3X1A/B/C members in the applicable clusters and jobs identified by the job structure analysis process.

TABLE 17
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A371 PERSONNEL

| TASKS | PERCENT MEMBERS PERFORMING (N=284) |
|--|---|
| C80 Write EPRs | 72 |
| B30 Counsel personnel on personal or military-related matters | 67 |
| K560 Access CAMS menus and data screens | 66 |
| C60 Conduct performance feedback worksheet sessions | 65 |
| C81 Write recommendations for awards and decorations | 63 |
| A1 Assign maintenance or repair work | 61 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 60 |
| A19 Plan or schedule work assignments | 57 |
| C76 Inspect personnel for compliance with military standards | 57 |
| A15 Establish performance standards for subordinates | 56 |
| C75 Inspect flightline maintenance actions | 55 |
| A20 Plan or schedule work priorities | 55 |
| B45 Interpret policies, directives, or procedures for subordinates | 54 |
| G260 Trace wiring, system, or interface diagrams | 54 |
| F181 Open or close canopies | 52 |
| F180 Open or close airframe components | 52 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 51 |
| B32 Direct flightline maintenance activities | 50 |
| C66 Evaluate personnel for compliance with performance standards or TOs | 50 |
| D104 Maintain training records, charts, or graphs | 50 |
| B29 Conduct supervisory orientations of newly assigned personnel | 49 |
| D101 Evaluate progress of trainees | 49 |
| G237 Inspect aircraft wiring | 49 |
| K561 Analyze CAMS data | 48 |
| D100 Evaluate personnel for training needs | 48 |
| G255 Research technical orders | 46 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 46 |
| A16 Establish work methods or controls | 45 |
| E120 Inventory tools | 45 |
| B52 Supervise F-15/F-111 Avionic Systems Craftsmen (2A371) | 45 |
| E118 Inspect tools or equipment | 44 |
| D91 Counsel trainees on training progress | 44 |
| E117 Initiate, annotate, or review aircraft flight or maintenance records | 43 |
| B53 Supervise F-15/F-111 Avionic Systems Journeymen, Attack Control (2A351A) | 43 |
| B54 Supervise F-15/F-111 Avionic Systems Journeymen, Comm/Nav/Penetration Aids (2A351C) | 43 |
| A6 Determine logistics requirements | 42 |
| B49 Supervise F-15/F-111 Avionic Systems Apprentices, Attack Control (2A331A) | 42 |
| B55 Supervise F-15/F-111 Avionic Systems Journeymen, Instruments and Flight Controls (2A351B) | 42 |
| B51 Supervise F-15/F-111 Avionic Systems Apprentices, Instruments and Flight Controls (2A331B) | 41 |

TABLE 18

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A351A AND DAFSC 2A371 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A351A (N=220) | 2A371 (N=284) | DIFFERENCE |
|--|-------------------|------------------|------------|
| H357 Troubleshoot INSS | 80 | 30 | 50 |
| H336 Remove or replace radar system LRU's | 79 | 29 | 50 |
| H305 Operationally or BIT check INSS | 84 | 34 | 50 |
| H311 Pressurize and leak check radar systems | 76 | 26 | 50 |
| H327 Remove or replace INS LRU's | 80 | 31 | 49 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 77 | 29 | 48 |
| H282 Isolate waveguide pressure leaks | 75 | 27 | 48 |
| H308 Operationally or BIT check radar systems | 81 | 34 | 47 |
| G249 Remove or replace waveguides | 80 | 37 | 43 |
| G247 Remove or replace coaxial cables | 79 | 38 | 41 |
| F208 Remove or install aircraft dehumidifiers or desiccants | 68 | 28 | 40 |
| H284 Load OFPs to computer complexes | 65 | 25 | 40 |
| G251 Remove, replace, or repair multipin connectors | 81 | 41 | 40 |
| B30 Counsel personnel on personal or military-related matters | 42 | 67 | -25 |
| B32 Direct flightline maintenance activities | 25 | 50 | -25 |
| A15 Establish performance standards for subordinates | 30 | 56 | -26 |
| C58 Analyze workload requirements | 11 | 37 | -26 |
| A20 Plan or schedule work priorities | 29 | 55 | -26 |
| A16 Establish work methods or controls | 18 | 45 | -27 |
| A24 Schedule personnel for leave or TDY assignments | 8 | 36 | -28 |
| B45 Interpret policies, directives, or procedures for subordinates | 26 | 54 | -28 |
| C81 Write recommendations for awards and decorations | 33 | 63 | -30 |
| C71 Evaluate work schedules | 6 | 36 | -30 |
| A6 Determine logistics requirements | 11 | 42 | -31 |
| A19 Plan or schedule work assignments | 26 | 57 | -31 |
| B52 Supervise F-15/F-111 Avionic Systems Craftsmen (2A371) | 13 | 45 | -32 |
| B56 Supervise military personnel with AFSCs other than 2A33X1 | 15 | 51 | -36 |

TABLE 19

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A351B AND DAFSC 2A371 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A351B (N=154) | 2A371 (N=284) | DIFFERENCE |
|--|-------------------|------------------|------------|
| | | | |
| I403 Operationally check hydraulic pressure indicating systems | 87 | 24 | 63 |
| I470 Troubleshoot nozzle position indicating systems | 83 | 21 | 62 |
| I392 Operationally check airborne signal data recording systems | 81 | 21 | 60 |
| I481 Troubleshoot turbine inlet temperature indicating systems | 77 | 17 | 60 |
| I464 Troubleshoot fuel flow indicating systems | 86 | 26 | 60 |
| I478 Troubleshoot tachometer systems | 80 | 20 | 60 |
| I379 Adjust primary or standby instrument system components | 81 | 21 | 60 |
| I453 Troubleshoot air data computer and primary instrument systems | 90 | 30 | 60 |
| I438 Remove or replace standby attitude indicators | 86 | 26 | 60 |
| I387 Calibrate fuel quantity indicating systems | 88 | 28 | 60 |
| I393 Operationally check attitude heading reference and instrument systems | 90 | 30 | 60 |
| I430 Remove or replace hydraulic pressure indicators | 86 | 26 | 60 |
| I465 Troubleshoot fuel quantity indicating systems | 87 | 28 | 59 |
| A20 Plan or schedule work priorities | 29 | 55 | -26 |
| A17 Plan briefings | 3 | 29 | -26 |
| C80 Write EPRs | 44 | 72 | -28 |
| A16 Establish work methods or controls | 17 | 45 | -28 |
| C75 Inspect flightline maintenance actions | 27 | 55 | -28 |
| B29 Conduct supervisory orientations of newly assigned personnel | 20 | 49 | -29 |
| A6 Determine logistics requirements | 12 | 42 | -30 |
| B30 Counsel personnel on personal or military-related matters | 36 | 67 | -31 |
| A24 Schedule personnel for leave or TDY assignments | 5 | 36 | -31 |
| C71 Evaluate work schedules | 5 | 36 | -31 |
| A19 Plan or schedule work assignments | 25 | 57 | -32 |
| C81 Write recommendations for awards and decorations | 29 | 63 | -34 |
| B52 Supervise F-15F-111 Avionic Systems Craftsmen (2A371) | 10 | 45 | -35 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 12 | 51 | -39 |

TABLE 20

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A351C AND DAFSC 2A371 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A351C (N=164) | 2A371 (N=284) | DIFFERENCE |
|--|-------------------|------------------|------------|
| Q257 Seal or reseal antennas | 83 | 30 | 53 |
| J525 Remove or replace TACAN system LRUs | 82 | 29 | 53 |
| I488 Operationally check ILSs | 84 | 31 | 53 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 84 | 32 | 52 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 84 | 32 | 52 |
| J541 Troubleshoot AG/IFF transponder systems | 75 | 23 | 52 |
| I511 Remove or replace AG/IFF transponder system LRUs | 73 | 22 | 51 |
| J504 Operationally or BIT check TACAN systems | 82 | 31 | 51 |
| J513 Remove or replace CMDS LRUs | 78 | 27 | 51 |
| J520 Remove or replace ILS LRUs | 78 | 27 | 51 |
| I484 Code mode 4 crypto equipment | 80 | 30 | 50 |
| J551 Troubleshoot intercommunication systems | 79 | 30 | 49 |
| C75 Inspect flightline maintenance actions | 29 | 55 | -26 |
| C66 Evaluate personnel for compliance with performance standards or TOS | 23 | 50 | -27 |
| B45 Interpret policies, directives, or procedures for subordinates | 27 | 54 | -27 |
| C58 Analyze workload requirements | 9 | 37 | -28 |
| B29 Conduct supervisory orientations of newly assigned personnel | 20 | 49 | -29 |
| B30 Counsel personnel on personal or military-related matters | 38 | 67 | -29 |
| C76 Inspect personnel for compliance with military standards | 28 | 57 | -29 |
| A6 Determine logistics requirements | 10 | 42 | -32 |
| A24 Schedule personnel for leave or TDY assignments | 2 | 36 | -34 |
| C71 Evaluate work schedules | 2 | 36 | -34 |
| C81 Write recommendations for awards and decorations | 27 | 63 | -36 |
| B52 Supervise F-15/F-111 Avionic Systems Craftsmen (2A371) | 8 | 45 | -37 |
| B56 Supervise military personnel with AFSCs other than 2A371 | 10 | 51 | -41 |

TABLE 21
REPRESENTATIVE TASKS PERFORMED BY DAFSC 2A390 PERSONNEL

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=3)</u> |
|---|---|
| C75 Inspect flightline maintenance actions | 100 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 100 |
| B32 Direct flightline maintenance activities | 67 |
| A1 Assign maintenance or repair work | 67 |
| B27 Adjust daily maintenance plans to meet operational commitments | 67 |
| C76 Inspect personnel for compliance with military standards | 67 |
| A20 Plan or schedule work priorities | 67 |
| A19 Plan or schedule work assignments | 67 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 67 |
| A6 Determine logistics requirements | 67 |
| C65 Evaluate maintenance or use of workspace, equipment, or supplies | 67 |
| A9 Develop inspection procedures | 67 |
| B30 Counsel personnel on personal or military-related matters | 67 |
| A24 Schedule personnel for leave or TDY assignments | 67 |
| C80 Write EPRs | 67 |
| D102 Evaluate training methods and techniques | 33 |
| E150 Verify MICAP conditions | 33 |
| C63 Evaluate maintenance and inspection report findings | 33 |
| C61 Evaluate causes of mission operational discrepancies | 33 |
| B39 Implement safety or security programs | 33 |
| B53 Supervise F-15/F-111 Avionic Systems Journeymen, Attack Control (2A351A) | 33 |
| B50 Supervise F-15/F-111 Avionic Systems Apprentices, Comm/Nav/Penetration Aids (2A331C) | 33 |
| B55 Supervise F-15/F-111 Avionic Systems Journeymen, Instruments and Flight Controls (2A351B) | 33 |
| B54 Supervise F-15/F-111 Avionic Systems Journeymen, Comm/Nav/Penetration Aids (2A351C) | 33 |

TABLE 22

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 2A371 AND DAFSC 2A390 PERSONNEL
(PERCENT MEMBERS PERFORMING)

| TASKS | 2A371 (N=284) | 2A390 (N=3) | DIFFERENCE |
|---|------------------|----------------|------------|
| B45 Interpret policies, directives, or procedures for subordinates | 54 | 0 | 54 |
| G260 Trace wiring, system, or interface diagrams | 54 | 0 | 54 |
| F181 Open or close canopies | 52 | 0 | 52 |
| F180 Open or close airframe components, such as panels or doors | 52 | 0 | 52 |
| G239 Inspect coaxial cables and connectors | 51 | 0 | 51 |
| F163 Connect or disconnect aircraft external power | 50 | 0 | 50 |
| F162 Connect or disconnect aircraft external cooling air units | 50 | 0 | 50 |
| G241 Inspect multipin connectors | 50 | 0 | 50 |
| G237 Inspect aircraft wiring | 49 | 0 | 49 |
| G255 Research technical orders | 46 | 0 | 46 |
| B28 Conduct staff meetings | 13 | 33 | -20 |
| H150 Verify MICAP conditions | 11 | 33 | -22 |
| A6 Determine logistics requirements | 42 | 67 | -25 |
| E128 Maintain property CA/CRLs | 7 | 33 | -26 |
| A24 Schedule personnel for leave or TDY assignments | 36 | 67 | -31 |
| B27 Adjust daily maintenance plans to meet operational commitments | 32 | 67 | -35 |
| A9 Develop inspection procedures | 31 | 67 | -36 |
| E138 Participate in TCTO meetings | 28 | 67 | -39 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 60 | 100 | -40 |
| C65 Evaluate maintenance or use of workspace, equipment, or supplies | 24 | 67 | -43 |
| C75 Inspect flightline maintenance actions | 55 | 100 | -45 |
| E136 Monitor hazardous waste programs | 6 | 67 | -61 |

TRAINING ANALYSIS

Occupational surveys provide information which can be useful in the development and revision of relevant training programs. Factors used to evaluate entry-level AFSC 2A3X1A/B/C training include duties being performed by first-enlistment (1-48 months TAFMS) personnel across career ladder jobs, percentages of members performing specific tasks, ratings of how much training emphasis tasks should receive in formal training, and relative TD ratings.

First-Enlistment Personnel

In this study, there are 452 AFSC 2A3X1A/B/C members in their first enlistment, representing 38 percent of the total survey sample. Table 23 shows that the time spent on duties varies, depending upon aircraft and avionic system. Overall, members spend the majority of their time working on the shred-specific duty that corresponds to their avionic system specialty. Table 24 displays representative tasks performed by all AFSC 2A3X1A/B/C personnel with 1-48 months TAFMS. Tables 25-30 show tasks performed by first-enlistment personnel according to the aircraft and avionic system on which they work. Table 31 shows some of the equipment commonly used by personnel in their first 48 months of service, and Figure 2 shows the percent of first-enlistment members performing each job.

TE and TD Data

TE and TD data are secondary task factors that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs, provide a rank-ordering of those tasks considered important for airmen with 1-48 months TAFMS (TE) and a measure of the relative difficulty of those tasks (TD). When combined with data on the percentages of entry-level personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages for performance, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages for performance, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for new personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist training development personnel, AFOMS developed a computer program that uses these task factors and the percentage of 1-48 months TAFMS personnel performing tasks to produce Automated Training Indicators (ATI). ATIs correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 1, AETCR 52-22. ATIs allow training developers to quickly focus attention on those tasks which are most likely to qualify for resident course consideration.

TABLE 23

RELATIVE PERCENT OF TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL

| DUTIES | F-15 2A3X1A (N=173) | F-15 2A3X1B (N=90) | F-15 2A3X1C (N=112) | F-111 2A3X1A (N=41) | F-111 2A3X1B (N=19) | F-111 2A3X1C (N=17) |
|--|---------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| A ORGANIZING AND PLANNING | 1 | * | * | * | * | * |
| B DIRECTING AND IMPLEMENTING | 1 | * | * | * | * | 2 |
| C INSPECTING AND EVALUATING | * | * | * | * | * | 1 |
| D TRAINING | * | * | * | * | * | * |
| E PERFORMING GENERAL ADMINISTRATIVE AND SUPPLY FUNCTIONS | 3 | 2 | 4 | 3 | 2 | 3 |
| F PERFORMING GENERAL AIRCRAFT HANDLING FUNCTIONS | 24 | 20 | 20 | 27 | 16 | 25 |
| G PERFORMING GENERAL AVIONIC SYSTEMS MAINTENANCE FUNCTIONS | 21 | 15 | 18 | 20 | 12 | 16 |
| H MAINTAINING ATTACK CONTROL SYSTEMS | 35 | 8 | 8 | 40 | 7 | 5 |
| I MAINTAINING INSTRUMENT AND FLIGHT CONTROL SYSTEMS | 3 | 43 | 2 | 1 | 51 | 1 |
| J MAINTAINING COMMUNICATIONS, NAVIGATION, AND PENETRATION AIDS SYSTEMS | 3 | 3 | 39 | 2 | 2 | 42 |
| K PERFORMING CORE AUTOMATED MAINTENANCE SYSTEM (CAMS) FUNCTIONS | 9 | 9 | 9 | 7 | 6 | 8 |

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY ALL FIRST-ENLISTMENT 2A3X1 PERSONNEL

| TASKS | F-15 2A3X1A (N=173) | F-15 2A3X1B (N=90) | F-15 2A3X1C (N=112) | F-15 2A3X1A (N=41) | F-111 2A3X1B (N=19) | F-111 2A3X1C (N=17) |
|---|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| | 46 | 94 | 93 | 95 | 93 | 74 |
| F162 Connect or disconnect aircraft external cooling air units | 94 | 93 | 95 | 93 | 74 | 88 |
| F163 Connect or disconnect aircraft external power | 94 | 93 | 92 | 93 | 84 | 88 |
| F181 Open or close canopies | 90 | 89 | 83 | 95 | 68 | 100 |
| F180 Open or close airframe components, such as panels or doors | 88 | 88 | 89 | 90 | 74 | 94 |
| F186 Position or remove aircraft chocks or safety pins | 88 | 89 | 79 | 80 | 74 | 65 |
| G256 Safety wire components | 88 | 93 | 88 | 78 | 79 | 86 |
| F233 Walk wings or tails during aircraft towing operations | 88 | 87 | 80 | 90 | 79 | 71 |
| G239 Inspect coaxial cables and connectors | 87 | 67 | 86 | 85 | 47 | 82 |
| K560 Access CAMS menus and data screens | 86 | 97 | 87 | 71 | 68 | 82 |
| G237 Inspect aircraft wiring | 84 | 89 | 82 | 73 | 68 | 88 |
| G241 Inspect multipin connectors | 84 | 81 | 80 | 78 | 58 | 76 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 82 | 82 | 85 | 63 | 74 | 71 |
| G262 Troubleshoot aircraft wiring | 82 | 96 | 79 | 90 | 89 | 82 |
| F234 Wash aircraft | 80 | 80 | 79 | 90 | 79 | 82 |
| G260 Trace wiring, system, or interface diagrams | 78 | 91 | 83 | 93 | 89 | 88 |
| G265 Troubleshoot multipin connectors | 78 | 78 | 73 | 78 | 63 | 71 |
| G253 Repair aircraft wiring | 77 | 88 | 64 | 78 | 74 | 76 |
| G258 Solder or crimp connections on aircraft wiring | 72 | 78 | 72 | 63 | 74 | 71 |

TABLE 25
REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1A PERSONNEL WHO WORK ON THE F-15

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=173)</u> |
|--|---|
| H303 Operationally or BIT check HUD systems | 95 |
| H308 Operationally or BIT check radar systems | 95 |
| H324 Remove or replace HUD system LRUs | 92 |
| H305 Operationally or BIT check INSs | 88 |
| H336 Remove or replace radar system LRUs | 87 |
| H354 Troubleshoot HUD systems | 85 |
| H315 Remove or replace CC system LRUs | 83 |
| H296 Operationally check OWSs | 80 |
| H327 Remove or replace INS LRUs | 80 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 78 |
| H301 Operationally or BIT check CC systems | 77 |
| H357 Troubleshoot INSs | 77 |
| H341 Remove or replace video recording system LRUs | 73 |
| H300 Operationally check video recording systems | 72 |
| H282 Isolate waveguide pressure leaks | 69 |
| H372 Troubleshoot video recording systems | 68 |
| H365 Troubleshoot OWSs | 68 |
| H311 Pressurize and leak check radar systems | 66 |
| H346 Troubleshoot CC systems | 64 |
| H313 Remove or install OWS LRUs | 62 |
| H306 Operationally or BIT check LCGs | 55 |
| H304 Operationally or BIT check IG systems | 54 |
| H338 Remove or replace right-hand throttle grips | 53 |
| H318 Remove or replace control stick grips | 52 |
| H330 Remove or replace LCGs | 50 |
| H369 Troubleshoot system malfunction using NCI and CC data word recalls | 49 |
| H267 Boresight align HUD mounts | 46 |
| H278 Confidence test and BIT computer complexes | 42 |
| H360 Troubleshoot LCGs | 42 |
| H321 Remove or replace DRD units | 42 |
| H375 Upload or download targeting pods | 39 |
| H298 Operationally check remote map reader systems | 38 |
| H374 Upload or download FLIR pods | 36 |
| H326 Remove or replace IG system LRUs | 36 |
| H337 Remove or replace remote map reader system LRUs | 35 |
| H307 Operationally or BIT check MFDs | 34 |
| H290 Operationally check FLIR systems | 34 |
| H309 Operationally or BIT check TFRs | 33 |
| H294 Operationally check laser targeting systems | 32 |
| H352 Troubleshoot FLIR systems | 31 |
| H329 Remove or replace laser targeting system LRUs | 30 |

TABLE 26

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1B PERSONNEL WHO WORK ON THE F-15

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=90)</u> |
|---|--|
| I394 Operationally check AFCSs | 94 |
| I411 Operationally or BIT check AICSs | 93 |
| I412 Operationally or BIT check fuel quantity indicating systems | 93 |
| I420 Remove or replace attitude heading reference and instrument system LRUs | 93 |
| I393 Operationally check attitude heading reference and instrument systems | 93 |
| I390 Operationally and leak check pitot static and standby instrument systems | 92 |
| I391 Operationally check air data computer and primary instrument systems | 92 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 92 |
| I415 Remove or replace AFCS LRUs | 89 |
| I413 Operationally or BIT check HSI systems | 89 |
| I407 Operationally check standby attitude indicators | 88 |
| I438 Remove or replace standby attitude indicators | 87 |
| I450 Troubleshoot AFCSs | 86 |
| I434 Remove or replace pitot static, heater, or instrument system LRUs | 86 |
| I417 Remove or replace AICS LRUs | 84 |
| I396 Operationally check BIT systems | 84 |
| I403 Operationally check hydraulic pressure indicating systems | 84 |
| I387 Calibrate fuel quantity indicating systems | 83 |
| I428 Remove or replace fuel quantity indicating system LRUs | 83 |
| I430 Remove or replace hydraulic pressure indicators | 83 |
| I452 Troubleshoot AICSs | 82 |
| I427 Remove or replace fuel flow indicators | 82 |
| I419 Remove or replace airborne signal data recording system LRUs | 81 |
| I392 Operationally check airborne signal data recording systems | 81 |
| I472 Troubleshoot pitot static, heater, or instrument systems | 81 |
| I465 Troubleshoot fuel quantity indicating systems | 81 |
| I453 Troubleshoot air data computer and primary instrument systems | 81 |
| I455 Troubleshoot attitude heading reference and instrument systems | 80 |
| I404 Operationally check primary flight control or trim systems | 80 |
| I439 Remove or replace standby compasses | 79 |
| I379 Adjust primary or standby instrument system components | 77 |
| I476 Troubleshoot standby attitude indicators | 76 |
| I468 Troubleshoot hydraulic pressure indicating systems | 74 |
| I477 Troubleshoot standby compasses | 72 |
| I440 Remove or replace tachometers | 70 |
| I454 Troubleshoot airborne signal data recording systems | 70 |
| I376 Adjust airborne signal data recording system components | 69 |
| I408 Operationally check standby compasses | 69 |
| I433 Remove or replace oil pressure indicators | 69 |
| I414 Remove or replace acceleration indicating system LRUs | 68 |
| I470 Troubleshoot nozzle position indicating systems | 67 |

TABLE 27

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1C PERSONNEL WHO WORK ON THE F-15

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=112)</u> |
|--|---|
| J484 Code mode 4 crypto equipment | 88 |
| J509 Remove or replace AA/IFF transponder system LRUs | 88 |
| J492 Operationally or BIT check AA/IFF interrogator systems | 88 |
| J503 Operationally or BIT check RWRs or CRSs | 87 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 85 |
| J504 Operationally or BIT check TACAN systems | 85 |
| J523 Remove or replace RWR, CRS, or TTWS LRUs | 84 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 83 |
| J489 Operationally check intercommunications systems | 83 |
| J557 Troubleshoot UHF communication and audio signal systems | 83 |
| J525 Remove or replace TACAN system LRUs | 81 |
| J482 Accomplish end-of-runway mode 4/ RWR checks | 80 |
| J495 Operationally or BIT check CMDSS | 79 |
| J539 Troubleshoot AA/IFF interrogator systems | 78 |
| J553 Troubleshoot RWRs or CRSs | 78 |
| J555 Troubleshoot TACAN systems | 77 |
| J488 Operationally check ILSs | 75 |
| J513 Remove or replace CMDSS LRUs | 73 |
| J520 Remove or replace ILS LRUs | 73 |
| J501 Operationally or BIT check IBSs | 72 |
| J490 Operationally check secure voice crypto equipment | 71 |
| J524 Remove or replace secure voice crypto equipment LRUs | 71 |
| J515 Remove or replace EWWS LRUs | 71 |
| J497 Operationally or BIT check EWWSs | 71 |
| J521 Remove or replace intercommunications system LRUs | 71 |
| J551 Troubleshoot intercommunication systems | 70 |
| J494 Operationally or BIT check ADF systems | 69 |
| J543 Troubleshoot CMDSS | 69 |
| J554 Troubleshoot secure voice crypto equipment | 68 |
| J545 Troubleshoot EWWSs | 68 |
| J485 Code secure voice crypto equipment | 68 |
| J518 Remove or replace IBS LRUs | 68 |
| J528 Reprogram CMDSS system LRUs | 65 |
| J511 Remove or replace AG/IFF transponder system LRUs | 64 |
| J493 Operationally or BIT check AG/IFF interrogator systems | 62 |
| J531 Reprogram RWR system LRUs | 62 |
| J541 Troubleshoot AG/IFF transponder systems | 62 |
| J496 Operationally or BIT check ECM systems | 61 |
| J487 Operationally check avionics interface units | 60 |
| J512 Remove or replace avionics interface units | 52 |

TABLE 28

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1A PERSONNEL WHO WORK ON THE F-111

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=41)</u> |
|--|--|
| H327 Remove or replace INS LRUs | 98 |
| H339 Remove or replace TFR system LRUs | 93 |
| H305 Operationally or BIT check INSSs | 93 |
| H308 Operationally or BIT check radar systems | 93 |
| H309 Operationally or BIT check TFRs | 90 |
| H357 Troubleshoot INSSs | 90 |
| H370 Troubleshoot TFR systems | 85 |
| H335 Remove or replace radar altimeter system LRUs | 83 |
| H336 Remove or replace radar system LRUs | 83 |
| H299 Operationally check tracking handles | 78 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 78 |
| H366 Troubleshoot radar altimeter systems | 76 |
| H297 Operationally check radar altimeters | 76 |
| H284 Load OFPs to computer complexes | 76 |
| H311 Pressurize and leak check radar systems | 76 |
| H340 Remove or replace tracking handle LRUs | 73 |
| H317 Remove or replace computer complex system LRUs | 73 |
| H334 Remove or replace optical sight system LRUs | 71 |
| H312 Pressurize and leak check TFRs | 71 |
| H278 Confidence test and BIT computer complexes | 71 |
| H295 Operationally check optical sight systems | 68 |
| H348 Troubleshoot computer complexes | 66 |
| H280 Enter automatic data to computer complexes | 61 |
| H371 Troubleshoot tracking handles | 61 |
| H281 Enter manual data to computer complexes | 56 |
| H282 Isolate waveguide pressure leaks | 56 |
| H364 Troubleshoot optical sight systems | 51 |
| H275 Calibrate INSSs | 49 |
| H307 Operationally or BIT check MFDs | 46 |
| H286 Mode check computer complexes | 44 |
| H342 Swing and make compensation adjustments of INSSs | 41 |
| H291 Operationally check GPSs | 39 |
| H283 Key GPSs | 39 |
| H285 Load OFP to PDGs or MPDPs | 39 |
| H353 Troubleshoot GPSs | 39 |
| H310 Phase, align, and tune TFRs | 37 |
| H332 Remove or replace MFD system LRUs | 37 |
| H362 Troubleshoot MFDs | 37 |
| H323 Remove or replace GPS LRUs | 34 |
| H320 Remove or replace data transfer system LRUs | 34 |

TABLE 29
REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1B PERSONNEL WHO WORK ON THE F-111

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=19)</u> |
|--|--|
| I400 Operationally check flight control position indicating systems | 84 |
| I390 Operationally and leak check pitot static and standby instrumental systems | 84 |
| I435 Remove or replace primary flight control or trim system LRUs | 79 |
| I393 Operationally check attitude heading reference and instrument systems | 79 |
| I465 Troubleshoot fuel quantity indicating systems | 79 |
| I461 Troubleshoot flight control trim systems | 79 |
| I395 Operationally check AFRSs | 74 |
| I425 Remove or replace flight control position indicating system LRUs | 74 |
| I378 Adjust flight control position indicating system components | 74 |
| I443 Remove or replace turbine inlet temperature indicators | 74 |
| I377 Adjust automatic flight control or trim system components | 74 |
| I379 Adjust primary or standby instrument system components | 74 |
| I453 Troubleshoot air data computer and primary instrument systems | 74 |
| I473 Troubleshoot spike systems | 68 |
| I416 Remove or replace AFRS LRUs | 68 |
| I436 Remove or replace stability augmentation/stall inhibitor system LRUs | 68 |
| I431 Remove or replace local Mach probes | 68 |
| I437 Remove or replace stall warning and LCCS LRUs | 68 |
| I460 Troubleshoot flight control position indicating systems | 68 |
| I384 Apply flight instrument range markings | 68 |
| I481 Troubleshoot turbine inlet temperature indicating systems | 68 |
| I469 Troubleshoot manual flight control systems | 68 |
| I404 Operationally check primary flight control or trim systems | 68 |
| I391 Operationally check air data computer and primary instrument systems | 68 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 68 |
| I428 Remove or replace fuel quantity indicating system LRUs | 68 |
| I394 Operationally check AFSCs | 68 |
| I472 Troubleshoot pitot static, heater, or instrument systems | 68 |
| I438 Remove or replace standby attitude indicators | 68 |
| I424 Remove or replace EPR pressure indicating system LRUs | 63 |
| I451 Troubleshoot AFRSs | 63 |
| I381 Adjust spoiler switches | 63 |
| I399 Operationally check EPR indicating systems | 63 |
| I406 Operationally check stall warning and LCCSs | 63 |
| I444 Schedule check spike systems | 58 |
| I459 Troubleshoot EPR indicating systems | 58 |
| I446 Swing and make compensation adjustments of AFRS and instrument systems | 58 |
| I421 Remove or replace BIT system LRUs | 58 |
| I387 Calibrate fuel quantity indicating systems | 58 |
| I401 Operationally check flight director systems | 58 |
| I480 Troubleshoot translating cowl systems | 32 |

TABLE 30

REPRESENTATIVE TASKS PERFORMED BY FIRST-ENLISTMENT
DAFSC 2A3X1C PERSONNEL WHO WORK ON THE F-111

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=17)</u> |
|--|--|
| J506 Operationally or BIT check UHF communication and audio signal systems | 94 |
| J489 Operationally check intercommunication systems | 94 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 88 |
| J488 Operationally check ILSs | 88 |
| J499 Operationally or BIT check HF communications systems | 82 |
| J496 Operationally or BIT check ECM systems | 82 |
| J511 Remove or replace AG/IFF transponder system LRUs | 82 |
| J493 Operationally or BIT check AG/IFF interrogator systems | 82 |
| J557 Troubleshoot UHF communication and audio signal systems | 82 |
| J520 Remove or replace ILS LRUs | 82 |
| J555 Troubleshoot TACAN systems | 82 |
| J495 Operationally or BIT check CMDSs | 82 |
| J504 Operationally or BIT check TACAN systems | 82 |
| J513 Remove or replace CMDS LRUs | 76 |
| J525 Remove or replace TACAN system LRUs | 76 |
| J551 Troubleshoot intercommunications systems | 76 |
| J550 Troubleshoot ILSs | 76 |
| J517 Remove or replace HF communications system LRUs | 71 |
| J516 Remove or replace external ECM system LRUs (pods) | 71 |
| J487 Operationally check avionics interface units | 71 |
| J543 Troubleshoot CMDSs | 71 |
| J541 Troubleshoot AG/IFF transponder systems | 65 |
| J521 Remove or replace intercommunications system LRUs | 65 |
| J514 Remove or replace ECM system LRUs | 65 |
| J559 Upload or download ECM pods | 65 |
| J547 Troubleshoot HF communications systems | 65 |
| J498 Operationally or BIT check external ECM systems (pods) | 65 |
| J544 Troubleshoot ECM systems | 65 |
| J503 Operationally or BIT check RWRs or CRSs | 59 |
| J537 Transport ECM pods | 59 |
| J484 Code mode 4 crypto equipment | 53 |
| J523 Remove or replace RWR, CRS, or TTWS LRUs | 53 |
| J519 Remove or replace ICNIS LRUs | 53 |
| J492 Operationally or BIT check AA/IFF interrogator systems | 53 |
| J512 Remove or replace avionics interface units | 53 |
| J483 Adjust CRS indicators | 53 |
| J509 Remove or replace AA/IFF transponder system LRUs | 47 |
| J529 Reprogram external ECM pods | 47 |
| J535 Test ECM transmission lines | 47 |
| J522 Remove or replace JSS LRUs | 35 |

TABLE 31

EQUIPMENT USED BY FIRST-ENLISTMENT 2A3X1 PERSONNEL

| EQUIPMENT | F-15 2A3X1A (N=173) | F-15 2A3X1B (N=90) | F-15 2A3X1C (N=112) | F-15 2A3X1A (N=41) | F-111 2A3X1B (N=19) | F-111 2A3X1C (N=17) |
|---|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|---------------------------|
| Digital multimeters | 90 | 92 | 88 | 80 | 84 | 71 |
| External cooling air units | 86 | 83 | 79 | 80 | 63 | 65 |
| Wire repair kits | 84 | 81 | 82 | 71 | 63 | 47 |
| Maintenance stands | 82 | 82 | 76 | 49 | 74 | 59 |
| Portable hydraulic test stands (-6 carts) | 82 | 62 | 54 | 2 | 32 | 6 |
| Portable lighting equipment | 77 | 79 | 71 | 66 | 79 | 53 |
| Waveguide pressure testers | 71 | 17 | 50 | 54 | 11 | 12 |
| Weight off wheels (WOW) proximity boxes | 66 | 84 | 70 | 2 | 16 | 6 |
| Hydraulic servicing carts | 62 | 66 | 39 | 5 | 42 | 12 |
| Gas turbine generators/compressors | 59 | 64 | 55 | 41 | 68 | 41 |
| Heat guns, HT-900 | 57 | 66 | 53 | 37 | 42 | 18 |
| Gaseous nitrogen servicing equipment | 53 | 26 | 31 | 15 | 21 | 12 |
| Hydraulic test stands | 51 | 92 | 32 | 5 | 89 | 18 |
| Memory loader verifiers | 51 | 11 | 46 | 15 | 16 | 65 |
| Pod cradles | 45 | 29 | 42 | 29 | 16 | 59 |
| Time domain reflectometers (TDRs) | 40 | 18 | 33 | 61 | 11 | 35 |
| Bomb lifts (hammers) | 35 | 18 | 38 | 20 | 5 | 47 |
| Ground heaters and blowers | 33 | 52 | 24 | 56 | 84 | 53 |
| Trailers | 31 | 19 | 21 | 7 | 16 | 41 |
| Air compressors | 25 | 34 | 26 | 12 | 32 | 29 |
| TTU-205 D/F digital test sets | 18 | 88 | 14 | 7 | 95 | 6 |
| Automatic flight control system test sets | 16 | 69 | 12 | 5 | 42 | 6 |

JOBS PERFORMED BY FIRST-ENLISTMENT AFSC 2A3X1A/B/C PERSONNEL

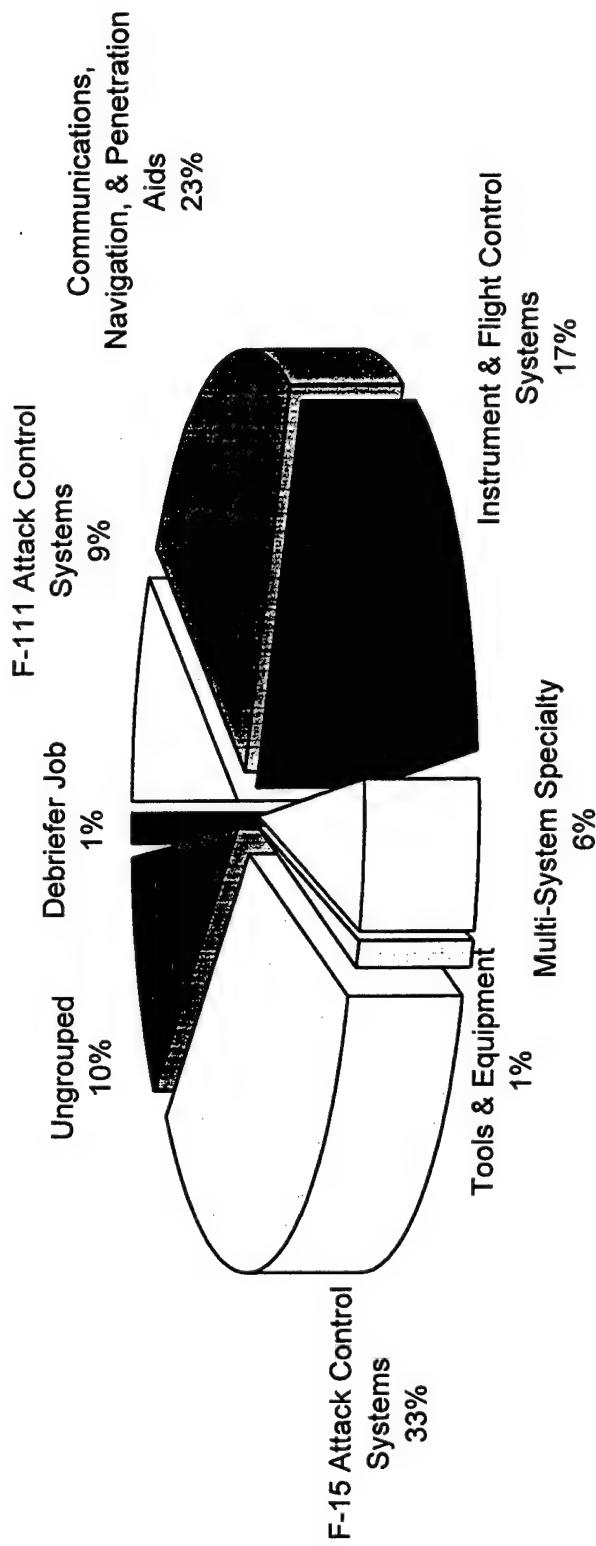


FIGURE 2

Tasks having the highest TE ratings for AFSC 2A3X1A/B/C personnel with 1-48 months TAFMS who work on the F-15 aircraft are listed in Table 32. Included for each task are the percentages of 1-48 months TAFMS performing the task for each of the three shreds, and the TD rating. Tasks with the highest TE ratings deal with troubleshooting and repairing aircraft wiring, cables, and connectors. These tasks are performed by high percentages of 1-48 months TAFMS personnel.

Tasks with the highest TE ratings for personnel who work on the F-111 aircraft are listed in Table 33. The same information is included as in Table 32, and the highest rated tasks are parallel to the F-15 aircraft.

Table 34 lists the tasks having the highest TD ratings for personnel who work on the F-15. The percentages of 2A3X1A/B/C personnel performing these tasks are included for those respondents with 1-48 months TAFMS, at the 5- and 7-skill level, and their TE ratings. The first enlistment and 5-skill level percentages are divided into the three shreds. Most tasks with high TD ratings deal with developing course training materials. For this reason, the majority of tasks with high TD ratings have low TE ratings and are performed by relatively low percentages of 1-24 months TAFMS, 1-48 months TAFMS, and 5- and 7-skill level members.

Tasks with the highest TD ratings for personnel who work on the F-111 aircraft are listed in Table 35. These tasks deal more with troubleshooting, adjusting, and checking various avionic systems.

Various lists of tasks, accompanied by TE and TD ratings, are contained in the TRAINING EXTRACT package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.

Specialty Training Standard (STS) Analysis

A comprehensive review of the AFSC 2A3X1A/B/C draft STS, dated October 1994, was made by comparing survey data to STS elements. To assist in the examination of the STS, technical school SMEs from Sheppard AFB matched JI tasks to appropriate sections and subsections of the STS. Elements with performance objectives were reviewed in terms of TE, TD, and percent members performing information, using the guidance provided in AFI 36-2623 and AETCR 52-22. Typically, tasks performed by 20 percent or more personnel in appropriate experience or skill-level groups, such as entry-level respondents (1-48 months TAFMS), and 5- and 7- skill level groups, should be considered for inclusion in the STS. Likewise, tasks with less than 20 percent performing in all of these groups should be considered for deletion. STS paragraphs containing general knowledge information, mandatory entries, or basic supervisory responsibilities were not examined.

TABLE 32
TASKS WITH HIGHEST TRAINING EMPHASIS (F-15 AIRCRAFT)

| TASKS | PERCENT MEMBERS PERFORMING | | | | |
|---|-------------------------------|-----------------|------------------|------|------|
| | F-15 | F-15 | F-15 | F-15 | F-15 |
| | 1ST | 1ST | 1ST | 1ST | TD |
| TE | ENL-A (N=173) | ENL-B (N=90) | ENL-C (N=112) | | |
| G260 Trace wiring, system, or interface diagrams | 6.71 | 78 | 91 | 83 | 5.96 |
| G262 Troubleshoot aircraft wiring | 6.38 | 82 | 96 | 79 | 6.25 |
| G265 Troubleshoot multipin connectors | 6.38 | 78 | 78 | 73 | 6.26 |
| G263 Troubleshoot coaxial cables and connectors | 6.38 | 76 | 41 | 74 | 6.52 |
| G253 Repair aircraft wiring | 6.25 | 77 | 88 | 64 | 5.55 |
| G251 Remove, replace, or repair multipin connectors | 6.12 | 78 | 70 | 68 | 5.73 |
| I465 Troubleshoot fuel quantity indicating systems | 6.12 | 6 | 81 | 3 | 6.19 |
| I404 Operationally check primary flight control or trim systems | 6.08 | 6 | 80 | 4 | 5.53 |
| I461 Troubleshoot flight control trim systems | 6.04 | 3 | 70 | 4 | 6.48 |
| I387 Calibrate fuel quantity indicating systems | 6.00 | 8 | 83 | 7 | 5.44 |
| I405 Operationally check stability augmentation/stall inhibitor systems | 6.00 | 1 | 23 | 0 | 5.10 |
| I435 Remove or replace primary flight control or trim system LRUs | 5.88 | 4 | 61 | 6 | 4.76 |
| G258 Solder or crimp connections on aircraft wiring | 5.71 | 72 | 78 | 72 | 5.53 |
| I446 Swing and make compensation adjustments of AFRS and instrument systems | 5.71 | 1 | 19 | 1 | 6.52 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 5.71 | 82 | 82 | 85 | 5.27 |
| H344 Troubleshoot attack radar systems or navigations radar systems | 5.67 | 78 | 20 | 19 | 6.60 |
| I394 Operationally check AFCSSs | 5.67 | 17 | 94 | 12 | 5.95 |
| I406 Operationally check stall warning and LCCSs | 5.67 | 1 | 32 | 0 | 5.72 |
| H357 Troubleshoot INSs | 5.67 | 77 | 28 | 15 | 5.17 |
| G250 Remove, replace, or repair coaxial connectors | 5.62 | 76 | 39 | 71 | 5.69 |
| I436 Remove or replace stability augmentation/stall inhibitor system LRUs | 5.58 | 1 | 28 | 1 | 4.54 |
| H309 Operationally or BIT check TFRs | 5.58 | 33 | 13 | 9 | 5.39 |
| I474 Remove or replace stability augmentation/stall inhibitor systems | 5.50 | 0 | 20 | 1 | 6.10 |
| G238 Inspect chafing problem areas | 5.50 | 77 | 76 | 79 | 4.62 |
| F163 Connect or disconnect aircraft external power | 5.50 | 94 | 93 | 92 | 3.01 |

TE MEAN = 2.56; S.D. = 1.75 (HIGH = 4.31)

TD MEAN = 5.00; S.D. = 1.00

TABLE 33
TASKS WITH HIGHEST TRAINING EMPHASIS (F-111 AIRCRAFT)

| TASKS | PERCENT MEMBERS PERFORMING | | | | |
|---|-------------------------------|------------------------|------------------------|------------------------|-----------------|
| | F-111 TE | F-111 1ST (N=41) | F-111 1ST (N=19) | F-111 1ST (N=17) | F-111 TD |
| | | F-111 | ENL-A (N=41) | ENL-B (N=19) | ENL-C (N=17) |
| G262 Troubleshoot aircraft wiring | 7.28 | 90 | 89 | 82 | 6.40 |
| G253 Repair aircraft wiring | 7.11 | 78 | 74 | 76 | 6.02 |
| G263 Troubleshoot coaxial cables and connectors | 7.11 | 59 | 42 | 71 | 6.21 |
| I450 Troubleshoot AFCSSs | 7.06 | 2 | 42 | 6 | 7.43 |
| I465 Troubleshoot fuel quantity indicating systems | 6.67 | 0 | 79 | 0 | 7.51 |
| J553 Troubleshoot RWRs or CRSs | 6.61 | 5 | 5 | 47 | 6.20 |
| I394 Operationally check AFCSSs | 6.61 | 5 | 68 | 6 | 6.35 |
| G251 Remove, replace, or repair multipin connectors | 6.56 | 76 | 58 | 53 | 5.87 |
| F159 Complete aircraft safe-for-maintenance checks | 6.56 | 44 | 37 | 65 | 4.54 |
| J545 Troubleshoot EWWSSs | 6.56 | 0 | 5 | 29 | 6.07 |
| G265 Troubleshoot multipin connectors | 6.56 | 78 | 63 | 71 | 6.03 |
| H296 Operationally check OWSs | 6.50 | 7 | 11 | 6 | 4.87 |
| H308 Operationally or BIT check radar systems | 6.50 | 93 | 16 | 12 | 5.68 |
| G255 Research technical orders | 6.50 | 66 | 58 | 65 | 5.44 |
| I390 Operationally and leak check pitot static and standby instrument systems | 6.44 | 2 | 84 | 6 | 5.74 |
| H346 Troubleshoot CC systems | 6.44 | 12 | 5 | 6 | 5.74 |
| H303 Operationally or BIT check HUD systems | 6.44 | 5 | 16 | 6 | 4.16 |
| I453 Troubleshoot air data computer and primary instrument systems | 6.44 | 5 | 74 | 6 | 6.32 |
| G264 Troubleshoot electrical relays | 6.39 | 39 | 58 | 47 | 6.13 |
| G258 Solder or crimp connections on aircraft wiring | 6.39 | 63 | 74 | 71 | 5.11 |
| G266 Troubleshoot triaxial cables and connectors | 6.39 | 29 | 32 | 35 | 6.11 |
| G259 Splice aircraft wiring | 6.39 | 49 | 74 | 53 | 5.34 |
| G250 Remove, replace, or repair coaxial connectors | 6.39 | 66 | 53 | 59 | 5.96 |
| J557 Troubleshoot UHF communication and audio signal systems | 6.39 | 5 | 11 | 82 | 5.21 |
| J539 Troubleshoot AA/IFF interrogator systems | 6.39 | 2 | 5 | 47 | 6.19 |
| H365 Troubleshoot OWSs | 6.39 | 2 | 16 | 6 | 5.64 |
| H301 Operationally or BIT check CC systems | 6.39 | 32 | 16 | 6 | 4.86 |

TE MEAN = 2.73; S.D. = 1.97 (HIGH = 4.70)

TD MEAN = 5.00; S.D. = 1.00

TABLE 34

TASKS WITH HIGHEST TASK DIFFICULTY (F-15 AIRCRAFT)

| TASKS | PERCENT MEMBERS PERFORMING | | | | | | | | | |
|--|----------------------------|-----------------------|-------------------------|--------------------------|--------------------------|------------------------|------------------------|-----------------------|-----------------|------------|
| | F-15 1ST (N=173) | F-15 1ST (N=90) | F-15 ENL-A (N=90) | F-15 ENL-B (N=112) | F-15 ENL-C (N=112) | F-15 51A (N=141) | F-15 51B (N=105) | F-15 51C (N=95) | F-15 (N=284) | F-15 TE |
| D94 Develop FTD course training materials | 8.44 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | .04 |
| D93 Develop CDC materials | 8.25 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | .08 |
| D96 Develop resident course training materials | 7.87 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | .04 |
| C79 Write civilian performance appraisals | 7.73 | 0 | 1 | 0 | 2 | 3 | 3 | 0 | 0 | .04 |
| A13 Draft budget requirements | 7.60 | 1 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | .04 |
| I469 Troubleshoot manual flight control systems | 7.23 | 4 | 66 | 4 | 18 | 77 | 77 | 18 | 20 | 5.00 |
| A14 Establish organizational policies | 7.14 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | .21 |
| D95 Develop new equipment training programs | 7.14 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 3 | .7 |
| I450 Troubleshoot AFCSS | 7.04 | 9 | 86 | 8 | 43 | 91 | 44 | 30 | 30 | .512 |
| H269 Boresight align navigation systems mounts | 7.00 | 35 | 7 | 4 | 48 | 22 | 18 | 9 | 9 | 1.50 |
| C73 Indorse civilian performance appraisals | 6.95 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | .04 |
| E113 Annotate civilian time cards | 6.91 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | .04 |
| H270 Boresight align optical sight systems | 6.90 | 16 | 6 | 1 | 20 | 12 | 6 | 9 | 9 | 2.71 |
| A8 Develop cost-reduction programs | 6.87 | 2 | 1 | 2 | 6 | 2 | 3 | 15 | 15 | .25 |
| I447 Swing and make compensation adjustments of standby compasses | 6.85 | 1 | 49 | 1 | 16 | 66 | 18 | 14 | 14 | .3.88 |
| H267 Boresight align HUD mounts | 6.85 | 46 | 12 | 5 | 58 | 30 | 24 | 13 | 13 | .1.38 |
| H271 Boresight align radar antenna mounts | 6.85 | 22 | 4 | 3 | 26 | 13 | 16 | 6 | 6 | 1.71 |
| B37 Draft recommendations for changes in equipment or personnel requirements | 6.83 | 1 | 1 | 0 | 3 | 2 | 2 | 2 | 2 | .58 |

TD MEAN = 5.00; S.D. = 1.00

TE MEAN = 2.56; S.D. = 1.75 (HIGH = 4.31)

TABLE 35

TASKS WITH HIGHEST TASK DIFFICULTY (F-111 AIRCRAFT)

| TASKS | PERCENT MEMBERS PERFORMING | | | | | | | | | |
|---|----------------------------|------------------------|--------------------------|--------------------------|--------------------------|------------------------|------------------------|-------------------------|------------------------|--------------------|
| | F-111 1ST TD | F-111 1ST (N=41) | F-111 ENL-A (N=19) | F-111 ENL-B (N=17) | F-111 ENL-C (N=65) | F-111 51A (N=50) | F-111 51B (N=59) | F-111 51C (N=284) | F-111 71 (N=284) | F-111 .72 TE |
| J552 Troubleshoot JSSs | 8.75 | 0 | 0 | 24 | 8 | 9 | 9 | 46 | 4 | .72 |
| A13 Draft budget requirements | 7.79 | 0 | 5 | 0 | 6 | 2 | 3 | 12 | 28 | |
| I465 Troubleshoot fuel quantity indicating systems | 7.51 | 0 | 79 | 0 | 28 | 86 | 5 | 28 | 6.67 | |
| I388 Conduct magnetic surveys | 7.46 | 0 | 21 | 0 | 11 | 46 | 0 | 4 | 94 | |
| I450 Troubleshoot AFCSS | 7.43 | 2 | 42 | 6 | 31 | 78 | 2 | 30 | 7.06 | |
| H271 Boresight align radar antenna mounts | 7.12 | 0 | 11 | 0 | 17 | 4 | 2 | 6 | 2.61 | |
| H269 Boresight align navigation systems mounts | 7.12 | 7 | 11 | 0 | 22 | 10 | 0 | 9 | 3.06 | |
| H272 Boresight align radar antennas | 7.12 | 17 | 11 | 0 | 18 | 2 | 5 | 6 | 2.72 | |
| H342 Swing and make compensation adjustments of INSSs | 6.95 | 41 | 0 | 6 | 40 | 8 | 8 | 5 | 1.22 | |
| J502 Operationally or BIT check JSSs | 6.94 | 0 | 0 | 29 | 14 | 2 | 47 | 4 | 1.22 | |
| J448 Swing and make compensation checks of AHRSs | 6.92 | 0 | 32 | 0 | 3 | 42 | 0 | 13 | 4.28 | |
| I474 Troubleshoot stability augmentation/stall inhibitor systems | 6.91 | 0 | 53 | 0 | 31 | 80 | 5 | 10 | 1.44 | |
| I446 Swing and make compensation adjustments of AFRS and instrument systems | 6.90 | 0 | 58 | 0 | 28 | 82 | 7 | 8 | 1.56 | |
| C77 Investigate accidents or incidents | 6.86 | 0 | 5 | 0 | 6 | 2 | 2 | 18 | 1.11 | |
| H273 Boresight FLIR systems | 6.85 | 2 | 5 | 0 | 6 | 0 | 0 | 11 | 3.17 | |
| J536 Test JSS transmission lines | 6.78 | 0 | 0 | 35 | 8 | 2 | 36 | 2 | .89 | |

TD MEAN = 5.00; S.D. = 1.00
 TE MEAN = 2.73; S.D. = 1.97 (HIGH = 4.70)

Survey data indicate the STS is well-constructed and provides comprehensive coverage of the work performed by personnel in this career ladder. Nearly all of the essential paragraphs and subparagraphs were adequately supported.

Examples of unsupported STS items for each aircraft, along with accompanying JI tasks and survey data, are listed in Tables 36 and 37. Training personnel and SMEs should review these items, as well as accompanying training documents, to determine if inclusion in future revisions is warranted.

Tasks not matched to any element of the STS are listed at the end of the computer listing located in associated training documents. These were reviewed to determine if any tasks concentrate around particular functions or jobs. Most of the unreferenced tasks for personnel working on the F-15 are technical tasks related to communication, navigation, and penetration aids. For F-111 personnel, most of the tasks deal with the instrument and flight control system. These tasks are listed in Tables 38 and 39.

Plan of Instruction (POI) Analysis

Technical school SMEs matched JI tasks to the training objectives in the six POIs in this career ladder: J3ABR2A331A 000, J3ABR2A331B 000, J3ABR2A331C 000, J3ABR2A331A 001, J3ABR2A331B 001, and J3ABR2A331C 001. All the POIs are dated 31 January 1995. Training objectives were evaluated in a method similar to the STS analysis, as percent members performing data for entry-level personnel, TE, and TD ratings were examined.

POI blocks, units of instruction, and criterion objectives were compared against guidance provided by AETCR 52-22 (30 percent or more entry-level personnel performing trained tasks). In accordance with this guidance, tasks trained in the course not meeting these criteria should be considered for elimination from formal course training if not justified on some other acceptable basis. Examples of unsupported POI objectives are listed in Tables 40 and 41 according to aircraft. These objectives deal with work performed on the specific avionic systems.

Several technical tasks performed by over 30 percent of entry-level personnel were not matched to the POIs. Examples of these tasks with survey data are listed in Tables 42 and 43, separated according to aircraft. Training personnel and SMEs should review these and other unreferenced tasks to determine if these areas should be incorporated into the formal course.

TABLE 36

EXAMPLES OF STS ITEMS NOT SUPPORTED BY OSR DATA (F-15 AIRCRAFT)

| STS REFERENCE/TASKS | 3-LVL COURSE PROF CODE | TNG EMP | 10a(4) (c) 3. Tow vehicle operator F232 Tow aircraft | PERCENT MEMBERS PERFORMING | | | | | |
|---|---------------------------------|------------|---|------------------------------|-----------------------------|------------------------------|-------------------------------------|-------------------------------------|------------------------------------|
| | | | | “A” 1ST ENL (N=173) | “B” 1ST ENL (N=90) | “C” 1ST ENL (N=112) | “A” 5- SKILL LEVEL (N=141) | “B” 5- SKILL LEVEL (N=105) | “C” 5- SKILL LEVEL (N=95) |
| 0151 10a(4) (c) 3. Tow vehicle operator | - | - | - | 1.29 | 7 | 7 | 9 | 18 | 17 |
| 0286 11m(2). Use F224 Service aircraft pneumatic systems | - | - | - | 1.92 | 3 | 7 | 0 | 6 | 10 |
| 0387 16a. Boresight equipment | - | - | - | 4.08 | 1 | 8 | 0 | 1 | 8 |
| 1386 Boresight probes | - | - | - | - | - | - | - | - | - |
| 0392 16f. Transmission line tester | - | - | - | 3.17 | 1 | 0 | 10 | 2 | 0 |
| 1534 Test CRS transmission lines | - | - | - | - | - | - | - | - | - |
| 0815 60c. Perform operational checkout | - | - | - | 3.17 | 14 | 2 | 1 | 16 | 8 |
| H295 Operationally check optical sight systems | - | - | - | - | - | - | - | 7 | 9 |
| 0830 62c. Perform operational checkout and BIT | 2b | - | - | - | - | - | - | - | - |
| H291 Operationally check GPSs | - | - | - | 3.00 | 5 | 1 | 0 | 5 | 2 |
| 0896 70d. Isolate malfunctions | - | - | - | 2.54 | 8 | 2 | 3 | 9 | 4 |
| H347 Troubleshoot CDSs | - | - | - | - | - | - | - | - | - |
| 0902 71c. Perform operation checkout | - | - | - | 3.38 | 2 | 0 | 0 | 4 | 2 |
| H287 Operationally check bombing timers | - | - | - | - | - | - | - | 0 | 4 |
| 0932 75c. Perform operational checkout | 2b | - | - | 5.25 | 1 | 16 | 2 | 6 | 10 |
| H395 Operationally check AFRSs | - | - | - | - | - | - | - | 3 | 5 |
| TD MEAN = 5.00; S.D. = 1.00 | - | - | - | - | - | - | - | 10 | 5.13 |
| TE MEAN = 2.56; S.D. = 1.75 (HIGH = 4.31) | - | - | - | - | - | - | - | - | 5.84 |

TABLE 37

EXAMPLES OF STS ITEMS NOT SUPPORTED BY OSR DATA (F-111 AIRCRAFT)

| STS REFERENCE/TASKS | 3-LVL COURSE PROF CODE | TNG EMP | 1ST ENL (N=41) | 1ST ENL (N=19) | 1ST ENL (N=17) | PERCENT MEMBERS PERFORMING | | | | | |
|---|---------------------------------|------------|----------------------|----------------------|----------------------|----------------------------|-------|-------|--------------------------------|--------------------------------|---------------------------------|
| | | | | | | “A” | “B” | “C” | “A” 5-SKILL LEVEL (N=50) | “B” 5-SKILL LEVEL (N=59) | “C” 5-SKILL LEVEL (N=284) |
| | | | | | | SKILL | SKILL | SKILL | SKILL | SKILL | TSK DIFF |
| 0219 10g(3) (a). Defuel team member | - | - | - | - | - | - | - | - | - | - | - |
| F185 Over-the-wing refuel or defuel aircraft | - | - | 1.28 | 2 | 5 | 0 | 6 | 10 | 0 | 0 | 5 |
| 0223 10g(5) (a). Remove | - | - | 1.17 | 0 | 16 | 0 | 6 | 6 | 3 | 7 | 4.04 |
| F210 Remove or install aircraft external fuel tanks | - | - | - | - | - | - | - | - | - | - | - |
| 0240 10I(2). Install safety pins | - | - | 4.83 | 2 | 11 | 6 | 6 | 6 | 0 | 15 | 3.00 |
| F209 Remove or install aircraft egress system safety pins | - | - | - | - | - | - | - | - | - | - | - |
| 0288 11n(1). Perform pre-use inspection | - | - | 1.50 | 0 | 5 | 0 | 6 | 0 | 3 | 10 | 2.87 |
| F202 Preuse inspect oil servicing carts | - | - | - | - | - | - | - | - | - | - | - |
| 0337 13f. Practice ESD Procedures | 2b | 3.11 | 15 | 16 | 12 | 15 | 8 | 3 | 12 | 10 | 3.82 |
| G246 Remove or install electrostatic discharge devices | - | - | - | - | - | - | - | - | - | - | - |
| 0510 25g(2). Upload | - | - | 3.78 | 10 | 5 | 0 | 8 | 2 | 0 | 13 | 4.86 |
| H375 Upload or download targeting pods | - | - | - | - | - | - | - | - | - | - | - |
| 0519 26f. Install system LRUs | - | - | 3.72 | 0 | 16 | 6 | 3 | 4 | 0 | 12 | 4.87 |
| H337 Remove or replace remote map reader system LRUs | - | - | - | - | - | - | - | - | - | - | - |
| 0760 53b(3). Perform operational checkout and BIT | - | - | - | - | - | - | - | - | - | - | - |
| H302 Operationally or BIT check data link systems | 4.06 | 5 | 11 | 6 | 14 | 2 | 7 | 12 | 5.24 | - | - |

TABLE 38

EXAMPLES OF TASKS WITH HIGH TE PERFORMED BY 20 PERCENT OR MORE AFSC 2A3X1A/B/C PERSONNEL
(WORKING ON F-15 AIRCRAFT) AND NOT REFERENCED TO THE STS

| TASKS | PERCENT MEMBERS PERFORMING | | | | | | |
|---|------------------------------|-----------------------------|------------------------------|-------------------------------------|-------------------------------------|------------------------------------|-------------|
| | “A” 1ST ENL (N=173) | “B” 1ST ENL (N=90) | “C” 1ST ENL (N=112) | “A” 5- SKILL LEVEL (N=141) | “B” 5- SKILL LEVEL (N=105) | “C” 5- SKILL LEVEL (N=95) | TSK DIFF |
| G257 Seal or reseal antennas | 45 | 42 | 79 | 66 | 68 | 89 | 30 |
| H313 Remove or install OWS LRUs | 62 | 19 | 8 | 77 | 59 | 40 | 17 |
| J482 Accomplish end-of-runway mode 4/RWR checks | 24 | 23 | 80 | 46 | 45 | 83 | 24 |
| J528 Reprogram CMDS system LRUs | 7 | 9 | 65 | 35 | 30 | 81 | 21 |
| J531 Reprogram RWR system LRUs | 6 | 12 | 63 | 36 | 46 | 85 | 21 |
| K581 Load LRU port numbers or serial numbers in CAMS | 83 | 84 | 82 | 79 | 81 | 86 | 42 |

TABLE 39

EXAMPLES OF TASKS WITH HIGH TE PERFORMED BY 20 PERCENT OR MORE AFSC 2A3X1A/B/C PERSONNEL
(WORKING ON F-111 AIRCRAFT) AND NOT REFERENCED TO THE STS

PERCENT MEMBERS PERFORMING

| TASKS | “A” | | “B” | | “C” | | “A” 5-SKILL | | “B” 5-SKILL | | “C” 5-SKILL | | TNG (N=284) | TSK DIFF |
|-------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|-------------|
| | 1ST (N=41) | ENL (N=19) | 1ST (N=17) | ENL (N=17) | LEVEL (N=65) | LEVEL (N=50) | LEVEL (N=50) | LEVEL (N=50) | LEVEL (N=59) | LEVEL (N=59) | LEVEL (N=59) | LEVEL (N=59) | | |
| E120 | 39 | 47 | 47 | 53 | 72 | 66 | 58 | 45 | 3.67 | 3.58 | | | | |
| F166 | 68 | 63 | 53 | 69 | 80 | 78 | 42 | 4.44 | 1.94 | | | | | |
| H299 | 78 | 5 | 0 | 83 | 12 | 12 | 9 | 1.33 | 4.66 | | | | | |
| I381 | 0 | 63 | 0 | 23 | 82 | 8 | 7 | .83 | 4.87 | | | | | |
| I405 | 2 | 58 | 0 | 28 | 80 | 10 | 12 | 1.89 | 6.40 | | | | | |
| I436 | 0 | 68 | 0 | 34 | 82 | 8 | 10 | .94 | 6.19 | | | | | |
| | | | | | | | | | | | | | | |
| I444 | 0 | 58 | 0 | 34 | 80 | 15 | 8 | .44 | 5.84 | | | | | |
| I445 | 0 | 47 | 0 | 20 | 76 | 3 | 8 | 1.06 | 4.09 | | | | | |
| I469 | 2 | 68 | 0 | 25 | 82 | 5 | 20 | 3.56 | 6.45 | | | | | |
| I474 | 0 | 53 | 0 | 31 | 80 | 5 | 10 | 1.44 | 6.91 | | | | | |
| K581 | 68 | 63 | 65 | 72 | 68 | 63 | 42 | 4.78 | 5.98 | | | | | |

TABLE 40

EXAMPLES OF POI OBJECTIVES NOT SUPPORTED BY OSR DATA (F-15 AIRCRAFT)

| POI OBJECTIVES/TASKS | V 1a, Using applicable TOs, support equipment, and an aircraft or trainer, remove and install MFDS LRU's with limited instructor assistance. Meas: PC | PERCENT MEMBERS | | | PERFORMING | | | TSK DIFF | |
|----------------------|--|-----------------------|---------------|-----------------------|-----------------------|------------|------------|-------------|------|
| | | TNG EMP (N=173) | ENL (N=90) | 1ST ENL (N=112) | 1ST ENL (N=112) | “A” ATI | “B” ATI | “C” ATI | |
| 0474 | V 1a, Using applicable TOs, support equipment, and an aircraft or trainer, remove and install MFDS LRU's with limited instructor assistance. Meas: PC | 2.79 | 16 | 7 | 5 | 7 | 7 | 7 | 4.02 |
| H332 | Remove or replace MFD system LRU's | 3.21 | 16 | 6 | 6 | 7 | 7 | 7 | 5.14 |
| 0476 | V 1c. Using applicable TOs, support equipment, and an aircraft or trainer, isolate malfunctions within the MFDS with limited instructor assistance. Meas: PC/W | 2.50 | 1 | 1 | 13 | 2 | 2 | 2 | 4.99 |
| H362 | Troubleshoot MFDS | 3.17 | 3 | 1 | 0 | 7 | 7 | 0 | 6.16 |
| 0480 | V 2c. Using applicable TOs, support equipment, and an aircraft or trainer, perform an operational checkout of the ICNIS with limited instructor assistance. Meas: PC/W | 3.17 | 27 | 7 | 6 | 11 | 11 | 11 | 4.33 |
| J549 | Troubleshoot ICNIS | 4.75 | 27 | 7 | 6 | 11 | 11 | 11 | 4.00 |
| 0512 | IX 1d. Using applicable TOs, support equipment, and an aircraft or trainer, isolate malfunctions within the GPS with limited instructor assistance. Meas: PC/W | 4.75 | 27 | 7 | 6 | 11 | 11 | 11 | 4.00 |
| H353 | Troubleshoot GPSs | 4.75 | 27 | 7 | 6 | 11 | 11 | 11 | 4.00 |
| 0526 | XII 1a. Using applicable TOs, support equipment, and an aircraft or trainer, remove and install TFR system LRU's with limited instructor assistance. Meas: PC | 4.75 | 27 | 7 | 6 | 11 | 11 | 11 | 4.00 |
| H339 | Remove or replace TFR system LRU's | 4.75 | 27 | 7 | 6 | 11 | 11 | 11 | 4.00 |

TE MEAN = 2.56; S.D. = 1.75 (HIGH = 4.31)
 TD MEAN = 5.00; S.D. = 1.00

TABLE 41

EXAMPLES OF POI OBJECTIVES NOT SUPPORTED BY OSR DATA (F-111 AIRCRAFT)

| POI OBJECTIVES/TASKS | PERCENT MEMBERS PERFORMING | “A” | | | “B” | | | “C” | | | TSK DIFF |
|---|-------------------------------|------------|---------------|---------------|---------------|---------------|------------|------------|------------|------|-------------|
| | | TNG EMP | 1ST (N=41) | ENL (N=19) | 1ST (N=17) | ENL (N=17) | “A” ATI | “B” ATI | “C” ATI | | |
| 0070 IV 1d. Using applicable TOs, support equipment, and an aircraft or trainer, isolate malfunctions within the CC system with limited instructor assistance. Meas: PC/W | | | | | | | | | | | |
| H346 Troubleshoot CC systems | 6.44 | 12 | 5 | 6 | 11 | 11 | 11 | 11 | 11 | 5.74 | |
| 0243 VII 3c. Using applicable TOs, support equipment, and an aircraft or trainer, perform an AIC static BIT checkout with limited instructor assistance. Meas: PC/W | 6.28 | 2 | 26 | 6 | 11 | 11 | 11 | 11 | 11 | 5.29 | |
| 1411 Operationally or BIT check AICSS | | | | | | | | | | | |
| 0380 VII 2d. Using applicable TOs, support equipment, and an aircraft or trainer, isolate malfunctions within the EWWs with limited instructor assistance. Meas: PC/W | 6.56 | 0 | 5 | 29 | 0 | 11 | 11 | 11 | 11 | 5.29 | |
| J545 Troubleshoot EWWSS | | | | | | | | | | | |
| 0539 XIII 2c. Using applicable TOs, support equipment, and an aircraft or trainer, perform an operational checkout of the CAVR system with limited instructor assistance. Meas: PC/W | 6.00 | 24 | 11 | 6 | 11 | 11 | 11 | 11 | 11 | 6.07 | |
| H300 Operationally check video recording systems | | | | | | | | | | | |
| 0865 XIII 2f. Using applicable TOs, support equipment, and an aircraft, perform a pressurization test using the nitrogen pressure test set with limited instructor assistance. Meas: PC | 2.11 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 2 | 5.15 | |
| J507 Pressure test ECM systems | | | | | | | | | | | |

TE MEAN = 2.73; S.D. = 1.97 (HIGH = 4.70)
 TD MEAN = 5.00; S.D. = 1.00

TABLE 42

EXAMPLES OF TASKS WITH HIGH TE PERFORMED BY 30 PERCENT OR MORE AFSC 2A3X1A/B/C PERSONNEL
(WORKING ON F-15 AIRCRAFT) AND NOT REFERENCED TO THE POI

| TASKS | PERCENT MEMBERS PERFORMING | | | | | | |
|---|-------------------------------|-----------------------------|-----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|
| | TNG EMP (N=173) | “A” 1ST ENL (N=90) | “B” 1ST ENL (N=90) | “C” 1ST ENL (N=112) | “A” ATI (N=112) | “B” ATI (N=112) | “C” ATI (N=112) |
| F209 Remove or install aircraft egress system safety pins | 2.04 | 42 | 40 | 41 | 4 | 4 | 4 |
| G237 Inspect aircraft wiring | 5.38 | 84 | 89 | 82 | 18 | 18 | 18 |
| G253 Repair aircraft wiring | 6.25 | 77 | 88 | 64 | 18 | 18 | 18 |
| G262 Troubleshoot aircraft wiring | 6.67 | 82 | 96 | 79 | 18 | 18 | 18 |
| G264 Troubleshoot electrical relays | 5.46 | 38 | 61 | 46 | 12 | 18 | 12 |
| H282 Isolate waveguide pressure leaks | 4.62 | 69 | 17 | 35 | 18 | 11 | 12 |
| H349 Troubleshoot control stick grips | 1.96 | 35 | 34 | 8 | 14 | 14 | 2 |
| I471 Troubleshoot oil pressure indicating systems | 4.04 | 2 | 64 | 2 | 7 | 17 | 7 |
| I478 Troubleshoot tachometer systems | 4.42 | 1 | 56 | 2 | 11 | 18 | 11 |
| J515 Remove or replace EWWSS LRUs | 1.83 | 13 | 11 | 71 | 1 | 1 | 6 |
| J525 Remove or replace TACAN systems LRUs | 3.83 | 17 | 21 | 81 | 7 | 7 | 17 |
| J548 Troubleshoot IBSSs | 2.92 | 2 | 6 | 62 | 7 | 7 | 17 |
| K581 Load LRU part numbers or serial numbers in CAMS | 4.96 | 83 | 84 | 82 | 18 | 18 | 18 |

TD MEAN = 5.00; S.D. = 1.00
TE MEAN = 2.56; S.D. = 1.75 (HIGH = 4.31)

TABLE 43

EXAMPLES OF TASKS WITH HIGH TE PERFORMED BY 30 PERCENT OR MORE AFSC 2A3X1A/B/C PERSONNEL
(WORKING ON F-111 AIRCRAFT) AND NOT REFERENCED TO THE POI

| TASKS | PERCENT MEMBERS PERFORMING | | | | | | TSK DIFF |
|-------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|------------|------------|-------------|
| | TNG EMP | “A” 1ST ENL (N=41) | “B” 1ST ENL (N=19) | “C” 1ST ENL (N=17) | “A” ATI | “B” ATI | |
| F186 | | 4.33 | 80 | 74 | 65 | 8 | 8 |
| G237 | | 5.50 | 73 | 68 | 88 | 18 | 18 |
| G253 | | 7.11 | 78 | 74 | 76 | 18 | 18 |
| 68 | | 2.78 | 61 | 5 | 6 | 17 | 7 |
| H280 | | 4.94 | 76 | 16 | 0 | 18 | 11 |
| H284 | | 4.94 | 76 | 16 | 0 | 18 | 11 |
| H312 | | 2.17 | 71 | 5 | 0 | 16 | 2 |
| I381 | | .83 | 0 | 63 | 0 | 0 | 0 |
| I401 | | 2.28 | 0 | 58 | 0 | 0 | 0 |
| I445 | | 1.06 | 0 | 47 | 0 | 0 | 0 |
| I470 | | 4.39 | 0 | 63 | 0 | 0 | 0 |
| I474 | | 1.44 | 0 | 53 | 0 | 0 | 0 |
| | | | | | | | |
| I481 | | 3.72 | 0 | 68 | 6 | 0 | 17 |
| | | | | | | | 7 |
| K581 | | 4.78 | 68 | 63 | 65 | 18 | 18 |
| | | | | | | | 5.98 |

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can be very useful for career ladder managers as they attempt to determine possible factors affecting job performance of career ladder airmen. Job satisfaction data can be expanded to provide indications of general attitudes within specific DAFSC groups.

With this in mind, job satisfaction responses for AFSC 2A3X1A/B/C personnel were analyzed and provide a comparison among TAFMS groups of the AFSC 2A3X1A/B/C career ladder, and a comparative sample of other non-lateral logistics personnel surveyed in 1994.

Table 44 shows this comparison of TAFMS group data of AFSC 2A3X1A/B/C personnel to the comparative sample surveyed the same calendar year. These data give a relative measure of how AFSC 2A3X1A/B/C personnel job satisfaction responses compare with similar Air Force specialties. Overall, job satisfaction declines as time in service increases across the TAFMS groups, except for reenlistment intentions. Reenlistment intentions increase with time in service across TAFMS groups, but remain lower than those of the comparative sample. AFSC 2A3X1A/B/C members with 1-48 and 49-96 months TAFMS indicated higher levels of satisfaction than those of the comparative sample in all categories, except reenlistment intentions.

In addition, job satisfaction data for identified job groups and clusters are provided on Table 45. Again, members across most identified groups provided generally positive job satisfaction responses. F-111 Attack Control Systems personnel and Debriefers, however, reported much lower responses when referring to the expressed interest in their job when compared to other job groups and clusters. F-111 Attack Control Systems personnel, supervisors, and Tools and Equipment personnel reported lower responses for their sense of accomplishment than did the other job groups. Low responses were also reported for the perceived use of talents by Debriefers and Tools and Equipment personnel; and the Debriefers and Supervisors indicated that their majority would retire. Also, the Tools and Equipment personnel indicated that many did not feel that they were using their training.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure a current data base for the Avionic Systems career ladder (AFSC 2A3X1A/B/C). Data compiled from this survey supports the successful merger of what was formerly two career fields, one for each aircraft. Furthermore, the Specialty Descriptions for the AFSC 2A3X1A/B/C career ladder accurately portray the clusters and jobs identified in this study. The majority of personnel perform technical tasks, but are differentiated according to one of the three avionic systems involved. A portion of the more experienced personnel work on all three areas.

TABLE 44

COMPARISON OF JOB SATISFACTION TO A COMPARATIVE SAMPLE

| | 1-48 MONTHS TAFMS | | | 49-96 MONTHS TAFMS | | | 97+ MONTHS TAFMS | | |
|---|-------------------|------------------------------|------------------|------------------------------|------------------|------------------------------|------------------|------------------------------|--|
| | 2A3X1 (N=455) | COMP SAMPLE (N=11,582) | 2A3X1 (N=227) | COMP SAMPLE (N=11,582) | 2A3X1 (N=503) | COMP SAMPLE (N=11,582) | 2A3X1 (N=503) | COMP SAMPLE (N=11,582) | |
| <u>EXPRESSED JOB INTEREST</u> | | | | | | | | | |
| INTERESTING | 83 | 63 | 75 | 61 | 72 | 69 | | | |
| SO-SO | 11 | 23 | 17 | 26 | 17 | 22 | | | |
| DULL | 6 | 13 | 8 | 12 | 11 | 9 | | | |
| <u>PERCEIVED USE OF TALENTS</u> | | | | | | | | | |
| FAIRLY WELL TO PERFECT | 83 | 69 | 82 | 71 | 83 | 79 | | | |
| NONE TO VERY LITTLE | 17 | 32 | 18 | 29 | 18 | 21 | | | |
| <u>PERCEIVED USE OF TRAINING</u> | | | | | | | | | |
| FAIRLY WELL TO PERFECT | 90 | 87 | 88 | 84 | 78 | 80 | | | |
| NONE TO VERY LITTLE | 10 | 11 | 11 | 14 | 22 | 18 | | | |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB</u> | | | | | | | | | |
| SATISFIED | 75 | 68 | 72 | 68 | 69 | 73 | | | |
| NEUTRAL | 13 | 17 | 15 | 15 | 11 | 11 | | | |
| DISSATISFIED | 12 | 15 | 14 | 16 | 20 | 15 | | | |
| <u>REENLISTMENT INTENTIONS</u> | | | | | | | | | |
| YES OR PROBABLY YES | 56 | 65 | 71 | 80 | 73 | 76 | | | |
| NO OR PROBABLY NO | 43 | 34 | 27 | 19 | 12 | 6 | | | |
| WILL RETIRE | 0 | 0 | 0 | 1 | 14 | 18 | | | |

Comparative data are from AFSCs 2A5X2 (Helicopter Maintenance), 2A6X4 (Aircraft Fuel Systems), 2A7X2 (Nondestructive Inspection), 2A7X4 (Fabrication and Parachute), 2E3X1 (Secure Communications Systems), 2F0X1 (Fuels), and 2W1X1 (Aircraft Armament Systems). They were all surveyed in 1994.

TABLE 45

JOB SATISFACTION ACROSS JOBS

| | F-15 ATTACK CONTROL SYSTEMS JOB (STG134) | F-111 ATTACK CONTROL SYSTEMS JOB (STG144) | COMMUNICATION, NAVIGATION, AND PENETRATION AIDS JOB (STG136) | INSTRUMENT AND FLIGHT CONTROL SYSTEMS JOB (STG131) | MULTI- SYSTEM SPECIALTY JOB (STG142) |
|---|---|--|--|--|--|
| <u>EXPRESSED JOB INTEREST</u> | | | | | |
| INTERESTING | 86 | 57 | 80 | 74 | 81 |
| SO-SO | 9 | 27 | 12 | 17 | 14 |
| DULL | 6 | 16 | 8 | 8 | 5 |
| <u>PERCEIVED USE OF TALENTS</u> | | | | | |
| FAIRLY WELL TO PERFECT | 86 | 72 | 81 | 80 | 90 |
| NONE TO VERY LITTLE | 13 | 28 | 19 | 20 | 10 |
| <u>PERCEIVED USE OF TRAINING</u> | | | | | |
| FAIRLY WELL TO PERFECT | 86 | 85 | 93 | 93 | 89 |
| NONE TO VERY LITTLE | 14 | 15 | 6 | 6 | 11 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB</u> | | | | | |
| SATISFIED | 74 | 57 | 70 | 72 | 78 |
| NEUTRAL | 14 | 20 | 14 | 15 | 9 |
| DISSATISFIED | 11 | 23 | 16 | 12 | 14 |
| <u>REENLISTMENT INTENTIONS</u> | | | | | |
| YES OR PROBABLY YES | 64 | 64 | 67 | 57 | 79 |
| NO OR PROBABLY NO | 34 | 35 | 31 | 38 | 18 |
| WILL RETIRE | 1 | 0 | 2 | 3 | 3 |

TABLE 45 (CONTINUED)

JOB SATISFACTION ACROSS JOBS

| | TEST SQUADRON JOB (STG128) | FTD INSTRUCTOR JOB (STG139) | DEBRIEFER JOB (STG127) | MAINTENANCE OPERATIONS CONTROL CENTER COORDINATOR JOB (STG55) |
|---|----------------------------|-----------------------------|------------------------|---|
| <u>EXPRESSED JOB INTEREST</u> | | | | |
| INTERESTING | 100 | 100 | 38 | 77 |
| SO-SO | 0 | 0 | 38 | 15 |
| DULL | 0 | 0 | 23 | 8 |
| <u>PERCEIVED USE OF TALENTS</u> | | | | |
| FAIRLY WELL TO PERFECT | 100 | 100 | 46 | 70 |
| NONE TO VERY LITTLE | 0 | 0 | 54 | 31 |
| <u>PERCEIVED USE OF TRAINING</u> | | | | |
| FAIRLY WELL TO PERFECT | 100 | 100 | 77 | 54 |
| NONE TO VERY LITTLE | 0 | 0 | 23 | 46 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB</u> | | | | |
| SATISFIED | 100 | 100 | 62 | 62 |
| NEUTRAL | 0 | 0 | 23 | 23 |
| DISSATISFIED | 0 | 0 | 15 | 15 |
| <u>REENLISTMENT INTENTIONS</u> | | | | |
| YES OR PROBABLY YES | 100 | 78 | 23 | 62 |
| NO OR PROBABLY NO | 0 | 0 | 69 | 15 |
| WILL RETIRE | 0 | 22 | 0 | 23 |

TABLE 45 (CONTINUED)

JOB SATISFACTION ACROSS JOBS

| | QUALITY ASSURANCE JOB (STG117) | EXPEDITER JOB (STG107) | SUPERVISOR JOB (STG354) | MANAGER JOB (STG233) | TOOLS AND EQUIPMENT JOB (STG96) |
|---|-----------------------------------|---------------------------|----------------------------|-------------------------|------------------------------------|
| <u>EXPRESSED JOB INTEREST</u> | | | | | |
| INTERESTING | 70 | 60 | 63 | 67 | 61 |
| SO-SO | 30 | 25 | 25 | 33 | 17 |
| DULL | 0 | 15 | 13 | 0 | 22 |
| <u>PERCEIVED USE OF TALENTS</u> | | | | | |
| FAIRLY WELL TO PERFECT | 100 | 80 | 82 | 100 | 43 |
| NONE TO VERY LITTLE | 0 | 20 | 19 | 0 | 57 |
| <u>PERCEIVED USE OF TRAINING</u> | | | | | |
| FAIRLY WELL TO PERFECT | 100 | 80 | 75 | 67 | 48 |
| NONE TO VERY LITTLE | 0 | 20 | 25 | 33 | 52 |
| <u>SENSE OF ACCOMPLISHMENT FROM JOB</u> | | | | | |
| SATISFIED | 70 | 70 | 56 | 67 | 57 |
| NEUTRAL | 10 | 0 | 13 | 17 | 4 |
| DISSATISFIED | 20 | 30 | 31 | 17 | 39 |
| <u>REENLISTMENT INTENTIONS</u> | | | | | |
| YES OR PROBABLY YES | 90 | 55 | 19 | 67 | 52 |
| NO OR PROBABLY NO | 10 | 15 | 13 | 17 | 22 |
| WILL RETIRE | 0 | 30 | 69 | 17 | 26 |

Most of the STS and the POIs are supported by survey data, but there are still several areas which are performed by a minimal percentage of personnel. Conversely, there are several tasks not matched in either document that require review for possible inclusion in the training documents.

F-111 Attack Control Systems personnel, Debriefers, and Tools and Equipment personnel report much lower job satisfaction than members of the other job groups. In general, they have a reduced interest in the job, a lower sense of accomplishment, and lowered perception of the use of their talents and training. Poor job satisfaction is especially evident in the F-111 Attack Control Systems personnel when they are compared to their F-15 counterparts. For all AFSC 2A3X1A/B/C personnel, reenlistment intentions are slightly lower than for similar Air Force personnel surveyed in 1994.

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY MEMBERS OF SPECIALTY JOBS

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TABLE A1
F-15 ATTACK CONTROL SYSTEMS JOB (STG134)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=194)</u> |
|---|---|
| H303 Operationally or BIT check HUD systems | 98 |
| H308 Operationally or BIT check radar systems | 97 |
| F162 Connect or disconnect aircraft external cooling air units | 96 |
| F163 Connect or disconnect aircraft external power | 96 |
| H324 Remove or replace HUD system LRUs | 96 |
| H305 Operationally or BIT check INSs | 96 |
| G256 Safety wire components | 94 |
| G243 Inspect waveguides | 94 |
| F181 Open or close canopies | 93 |
| G242 Inspect triaxial cables and connectors | 93 |
| G249 Remove or replace waveguides | 93 |
| H336 Remove or replace radar system LRUs | 92 |
| G239 Inspect coaxial cables and connectors | 92 |
| H354 Troubleshoot HUD systems | 92 |
| G262 Troubleshoot aircraft wiring | 92 |
| G241 Inspect multipin connectors | 91 |
| F233 Walk wings or tails during aircraft towing operations | 91 |
| F180 Open or close airframe components, such as panels or doors | 90 |
| F186 Position or remove aircraft chocks or safety pins | 90 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 90 |
| F182 Open or close weapons bays, radomes, or pallets | 90 |
| G235 Analyze ASP latch data | 89 |
| G237 Inspect aircraft wiring | 89 |
| F159 Complete aircraft safe-for-maintenance checks | 88 |
| K560 Access CAMS menus and data screens | 88 |
| H327 Remove or replace INS LRUs | 88 |
| G247 Remove or replace coaxial cables | 88 |
| G260 Trace wiring, system, or interface diagrams | 87 |
| G248 Remove or replace triaxial cables | 87 |
| G265 Troubleshoot multipin connectors | 87 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 86 |
| H315 Remove or replace CC system LRUs | 86 |
| K581 Load LRU part numbers or serial numbers in CAMS | 85 |
| H301 Operationally or BIT check CC systems | 85 |
| G263 Troubleshoot coaxial cables and connectors | 85 |
| G250 Remove, replace, or repair coaxial connectors | 85 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 84 |
| H357 Troubleshoot INSs | 84 |
| G252 Remove, replace, or repair triaxial connectors | 84 |
| G266 Troubleshoot triaxial cables and connectors | 84 |
| H296 Operationally check OWSs | 82 |
| G258 Solder or crimp connections on aircraft wiring | 79 |

TABLE A2
F-111 ATTACK CONTROL SYSTEMS JOB (STG144)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=74)</u> |
|---|--|
| H327 Remove or replace INS LRUs | 99 |
| F181 Open or close canopies | 97 |
| H305 Operationally or BIT check INSS | 97 |
| F163 Connect or disconnect aircraft external power | 96 |
| F162 Connect or disconnect aircraft external cooling air units | 96 |
| H339 Remove or replace TFR system LRUs | 96 |
| F233 Walk wings or tails during aircraft towing operations | 95 |
| H370 Troubleshoot TFR systems | 95 |
| G260 Trace wiring, system, or interface diagrams | 95 |
| G262 Troubleshoot aircraft wiring | 95 |
| F180 Open or close airframe components, such as panels or doors | 93 |
| H357 Troubleshoot INSS | 92 |
| F182 Open or close weapons bays, radomes, or pallets | 92 |
| H308 Operationally or BIT check radar systems | 92 |
| H309 Operationally or BIT check TFRs | 92 |
| G243 Inspect waveguides | 89 |
| H366 Troubleshoot radar altimeter systems | 89 |
| G239 Inspect coaxial cables and connectors | 88 |
| H299 Operationally check tracking handles | 86 |
| G249 Remove or replace waveguides | 86 |
| H344 Troubleshoot attack radar systems or navigation radar systems | 85 |
| G241 Inspect multipin connectors | 85 |
| H297 Operationally check radar altimeters | 85 |
| H311 Pressurize and leak check radar systems | 85 |
| H335 Remove or replace radar altimeter system LRUs | 85 |
| H284 Load OFPs to computer complexes | 84 |
| G253 Repair aircraft wiring | 84 |
| H336 Remove or replace radar system LRUs | 82 |
| G237 Inspect aircraft wiring | 82 |
| F234 Wash aircraft | 82 |
| G265 Troubleshoot multipin connectors | 82 |
| G251 Remove, replace, or repair multipin connectors | 82 |
| G256 Safety wire components | 81 |
| H312 Pressurize and leak check TFRs | 80 |
| F186 Position or remove aircraft chocks or safety pins | 79 |
| K560 Access CAMS menus and data screens | 78 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 77 |
| H278 Confidence test and BIT computer complexes | 76 |
| H317 Remove or replace computer complex system LRUs | 76 |
| H348 Troubleshoot computer complexes | 76 |
| G263 Troubleshoot coaxial cables and connectors | 76 |
| F176 Launch or recover aircraft | 72 |

TABLE A3
COMMUNICATION, NAVIGATION, AND PENETRATION AIDS JOB (STG136)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=171)</u> |
|---|---|
| J504 Operationally or BIT check TACAN systems | 97 |
| F162 Connect or disconnect aircraft external cooling air units | 96 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 96 |
| IS26 Remove or replace UHF communication and audio signal system LRUs | 95 |
| J489 Operationally check intercommunications systems | 95 |
| JS57 Troubleshoot UHF communication and audio signal systems | 95 |
| F163 Connect or disconnect aircraft external power | 94 |
| JS25 Remove or replace TACAN system LRUs | 94 |
| JS55 Troubleshoot TACAN systems | 94 |
| G256 Safety wire components | 93 |
| G260 Trace wiring, system, or interface diagrams | 93 |
| J484 Code mode 4 crypto equipment | 92 |
| J495 Operationally or BIT check CMDSs | 92 |
| K560 Access CAMS menus and data screens | 91 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 91 |
| G257 Seal or reseal antennas | 91 |
| J488 Operationally check ILs | 91 |
| F180 Open or close airframe components, such as panels or doors | 90 |
| G237 Inspect aircraft wiring | 90 |
| G262 Troubleshoot aircraft wiring | 90 |
| J503 Operationally or BIT check RWRs or CRSs | 89 |
| F181 Open or close canopies | 88 |
| G239 Inspect coaxial cables and connectors | 88 |
| JS51 Troubleshoot intercommunication systems | 88 |
| J550 Troubleshoot ILs | 88 |
| JS23 Remove or replace RWR, CRS, or TTWS LRUs | 87 |
| J482 Accomplish end-of-runway mode 4/RWR checks | 87 |
| JS13 Remove or replace CMDS LRUs | 86 |
| J553 Troubleshoot RWRs or CRSs | 85 |
| JS43 Troubleshoot CMDSs | 85 |
| G263 Troubleshoot coaxial cables and connectors | 85 |
| G238 Inspect chafing problem areas | 85 |
| F233 Walk wings or tails during aircraft towing operations | 84 |
| JS41 Troubleshoot AG/IFF transponder systems | 83 |
| J521 Remove or replace intercommunications system LRUs | 83 |
| F159 Complete aircraft safe-for-maintenance checks | 82 |
| K581 Load LRU part numbers or serial numbers in CAMS | 82 |
| G241 Inspect multipin connectors | 82 |
| G265 Troubleshoot multipin connectors | 82 |
| G258 Solder or crimp connections on aircraft wiring | 82 |
| J509 Remove or replace AA/IFF transponder system LRUs | 81 |
| JS11 Remove or replace AG/IFF transponder system LRUs | 81 |

TABLE A4
INSTRUMENT AND FLIGHT CONTROL SYSTEMS JOB (STG131)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=144)</u> |
|---|---|
| G262 Troubleshoot aircraft wiring | 99 |
| I394 Operationally check AFCSS | 97 |
| F163 Connect or disconnect aircraft external power | 97 |
| I391 Operationally check air data computer and primary instrument systems | 97 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 97 |
| I390 Operationally and leak check pitot static and standby instrument systems | 96 |
| I407 Operationally check standby attitude indicators | 96 |
| G260 Trace wiring, system, or interface diagrams | 95 |
| F162 Connect or disconnect aircraft external cooling air units | 95 |
| I393 Operationally check attitude heading reference and instrument systems | 95 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 94 |
| I420 Remove or replace attitude heading reference and instrument system LRUs | 94 |
| I453 Troubleshoot air data computer and primary instrument systems | 94 |
| I434 Remove or replace pitot static, heater, or instrument system LRUs | 94 |
| I438 Remove or replace standby attitude indicators | 94 |
| I415 Remove or replace AFCS LRUs | 93 |
| K560 Access CAMS menus and data screens | 92 |
| F181 Open or close canopies | 92 |
| I472 Troubleshoot pitot static, heater, or instrument systems | 92 |
| I428 Remove or replace fuel quantity indicating system LRUs | 92 |
| I430 Remove or replace hydraulic pressure indicators | 92 |
| F180 Open or close airframe components, such as panels or doors | 91 |
| I465 Troubleshoot fuel quantity indicating systems | 91 |
| G256 Safety wire components | 91 |
| G253 Repair aircraft wiring | 91 |
| I450 Troubleshoot AFCSS | 90 |
| I404 Operationally check primary flight control or trim systems | 90 |
| G237 Inspect aircraft wiring | 90 |
| I455 Troubleshoot attitude heading reference and instrument systems | 90 |
| I403 Operationally check hydraulic pressure indicating systems | 90 |
| I427 Remove or replace fuel flow indicators | 90 |
| F233 Walk wings or tails during aircraft towing operations | 88 |
| I476 Troubleshoot standby attitude indicators | 88 |
| F186 Position or remove aircraft chocks or safety pins | 87 |
| I387 Calibrate fuel quantity indicating systems | 87 |
| I379 Adjust primary or standby instrument system components | 87 |
| I419 Remove or replace airborne signal data recording system LRUs | 87 |
| I468 Troubleshoot hydraulic pressure indicating systems | 86 |
| I412 Operationally or BIT check fuel quantity indicating systems | 85 |
| G265 Troubleshoot multipin connectors | 85 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 84 |
| F159 Complete aircraft safe-for-maintenance | 81 |

TABLE A5
MULTI-SYSTEM SPECIALTY JOB (STG142)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=291)</u> |
|---|---|
| G260 Trace wiring, system, or interface diagrams | 99 |
| G256 Safety wire components | 99 |
| G253 Repair aircraft wiring | 99 |
| G262 Troubleshoot aircraft wiring | 98 |
| G241 Inspect multipin connectors | 98 |
| G239 Inspect coaxial cables and connectors | 98 |
| G243 Inspect waveguides | 98 |
| F163 Connect or disconnect aircraft external power | 97 |
| F162 Connect or disconnect aircraft external cooling air units | 97 |
| G265 Troubleshoot multipin connectors | 97 |
| G263 Troubleshoot coaxial cables and connectors | 97 |
| G251 Remove, replace, or repair multipin connectors | 97 |
| G258 Solder or crimp connections on aircraft wiring | 97 |
| F180 Open or close airframe components, such as panels or doors | 96 |
| F181 Open or close canopies | 96 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 96 |
| G250 Remove, replace, or repair coaxial connectors | 96 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 95 |
| G237 Inspect aircraft wiring | 95 |
| J489 Operationally check intercommunications systems | 94 |
| G247 Remove or replace coaxial cables | 94 |
| G249 Remove or replace waveguides | 94 |
| K560 Access CAMS menus and data screens | 93 |
| J557 Troubleshoot UHF communication and audio signal systems | 93 |
| G259 Splice aircraft wiring | 93 |
| G254 Repair chafed areas | 93 |
| H308 Operationally or BIT check radar systems | 92 |
| H305 Operationally or BIT check INSs | 92 |
| G238 Inspect chafing problem areas | 92 |
| J526 Remove or replace UHF communication and audio signal system LRUs | 92 |
| G242 Inspect triaxial cables and connectors | 91 |
| J506 Operationally or BIT check UHF communication and audio signal systems | 91 |
| K581 Load LRU part numbers or serial numbers in CAMS | 90 |
| I390 Operationally and leak check pitot static and standby instrument systems | 90 |
| F233 Walk wings or tail during aircraft towing operations | 90 |
| I418 Remove or replace air data computer and primary instrument system LRUs | 90 |
| F159 Complete aircraft safe-for-maintenance checks | 89 |
| J504 Operationally or BIT check TACAN systems | 88 |
| G248 Remove or replace triaxial cables | 87 |
| G252 Remove, replace, or repair triaxial connectors | 87 |
| G245 Remove or install electrical relays | 87 |
| I453 Troubleshoot air data computer and primary instrument systems | 86 |

TABLE A6
TEST SQUADRON JOB (STG128)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=5)</u> |
|---|---|
| F176 Launch or recover aircraft | 100 |
| F180 Open or close airframe components, such as panels or doors | 100 |
| F151 Accomplish end-of-runway checks | 100 |
| F163 Connect or disconnect aircraft external power | 100 |
| F162 Connect or disconnect aircraft external cooling air units | 100 |
| F212 Remove or install airframe components, such as panels, doors, or radomes | 100 |
| E117 Initiate, annotate, or review aircraft flight or maintenance records | 100 |
| G260 Trace wiring, system, or interface diagrams | 100 |
| F154 Clean aircraft, other than washing | 100 |
| G262 Troubleshoot aircraft wiring | 100 |
| F166 Ground aircraft | 100 |
| F230 Single-point or multipoint refuel or defuel aircraft | 100 |
| F153 Assist in removing or installing aircraft engines | 100 |
| G263 Troubleshoot coaxial cables and connectors | 100 |
| E120 Inventory tools, such as CTKs | 100 |
| F233 Walk wings or tails during aircraft towing operations | 100 |
| F181 Open or close canopies | 100 |
| G265 Troubleshoot multipin connectors | 100 |
| G238 Inspect chafing problem areas | 100 |
| G237 Inspect aircraft wiring | 100 |
| G241 Inspect multipin connectors | 100 |
| G239 Inspect coaxial cables and connectors | 100 |
| G256 Safety wire components | 100 |
| H305 Operationally or BIT check INSs | 100 |
| G264 Troubleshoot electrical relays | 100 |
| G258 Solder or crimp connections on aircraft wiring | 100 |
| F207 Raise or lower ejection seats | 100 |
| G251 Remove, replace, or repair multipin connectors | 100 |
| G266 Troubleshoot triaxial cables and connectors | 100 |
| G250 Remove, replace, or repair coaxial connectors | 100 |
| G261 Treat electrical components for corrosion | 100 |
| F157 Complete aircraft postflight inspection checklists | 80 |
| F158 Complete aircraft preflight inspection checklists | 80 |
| F156 Complete aircraft periodic inspection workcard items | 80 |
| F165 Determine serviceability of aircraft tires | 80 |
| G255 Research TOs | 80 |
| F183 Operationally check aircraft indicator warning lights | 80 |
| F161 Complete aircraft thruflight inspection checklists | 80 |
| F184 Operationally check aircraft lighting systems | 80 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 80 |
| H290 Operationally check FLIR systems | 80 |
| H303 Operationally or BIT check HUD systems | 80 |

TABLE A7
FTD INSTRUCTOR JOB (STG139)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=9)</u> |
|---|---|
| D87 Conduct FTD course classroom training | 100 |
| E134 Maintain TO files | 100 |
| D94 Develop FTD course training materials | 100 |
| D91 Counsel trainees on training progress | 100 |
| F162 Connect or disconnect aircraft external cooling air units | 100 |
| F163 Connect or disconnect aircraft external power | 100 |
| F164 Connect or disconnect aircraft hydraulic test stands or carts | 100 |
| F180 Open or close airframe components, such as panels or doors | 100 |
| F200 Preuse inspect maintenance stands | 100 |
| D83 Administer or score tests | 89 |
| D109 Score tests | 89 |
| B34 Direct maintenance of TO files | 89 |
| A19 Plan or schedule work assignments | 89 |
| C71 Evaluate work schedules | 89 |
| D101 Evaluate progress of trainees | 89 |
| B30 Counsel personnel on personal or military-related matters | 89 |
| F171 Inspect aircraft egress systems | 89 |
| F198 Preuse inspect hydraulic test stands or servicing carts | 89 |
| F181 Open or close canopies | 89 |
| G260 Trace wiring, system, or interface diagrams | 78 |
| C66 Evaluate personnel for compliance with performance standards or TOs | 78 |
| DI11 Write test questions | 78 |
| G255 Research TOs | 78 |
| D103 Maintain training devices | 78 |
| H308 Operationally or BIT check radar systems | 78 |
| C80 Write EPRs | 78 |
| A20 Plan or schedule work priorities | 78 |
| C60 Conduct performance feedback worksheet sessions | 78 |
| A15 Establish performance standards for subordinates | 78 |
| F159 Complete aircraft safe-for-maintenance checks | 78 |
| A24 Schedule personnel for leave or TDY assignments | 78 |
| A17 Plan briefings | 78 |
| C81 Write recommendations for awards and decorations | 78 |
| F166 Ground aircraft | 78 |
| F191 Preuse inspect aircraft external cooling air units | 78 |
| H298 Operationally check remote map reader systems | 78 |
| G235 Analyze ASP latch data | 78 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 67 |
| D84 Assign FTD course instructors | 67 |
| B45 Interpret policies, directives, or procedures for subordinates | 67 |
| D104 Maintain training records, charts, or graphs | 67 |
| DI08 Procure training aids, space, or equipment | 67 |

TABLE A8
DEBRIEFER JOB (STG127)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=13)</u> |
|--|--|
| K560 Access CAMS menus and data screens | 100 |
| E124 Maintain debriefing forms | 100 |
| K563 Change CAMS workcenter event narratives | 85 |
| K561 Analyze CAMS data | 77 |
| K571 Correct CAMS errors noted during daily verification process | 77 |
| K587 Verify accuracy of CAMS daily inputs | 69 |
| K562 Change CAMS performing workcenter codes | 69 |
| K573 Correct CAMS work unit codes | 69 |
| G236 Debrief crews | 54 |
| KS78 Initiate equipment maintenance discrepancies in CAMS | 46 |
| E117 Initiate, annotate, or review aircraft flight or maintenance records | 38 |
| K576 Establish CAMS historical reports | 38 |
| K572 Correct CAMS job standard narratives | 38 |
| K583 Start or stop CAMS job following events | 31 |
| K585 Update CAMS historical reports | 31 |
| E122 Maintain aircraft analysis historical records | 31 |
| A16 Establish work methods or controls | 31 |
| A1 Assign maintenance or repair work | 23 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 23 |
| B40 Implement self-inspection programs | 23 |
| B43 Implement work methods | 23 |
| K570 Conduct CAMS uncompleted maintenance event listing inquiries | 23 |
| A12 Develop self-inspection programs | 23 |
| G235 Analyze ASP latch data | 15 |
| B31 Direct development of status indicators, such as boards, graphs, or charts | 15 |
| A19 Plan or schedule work assignments | 15 |
| K569 Conduct CAMS training status inquiries | 15 |
| G244 Record ASP latch data | 15 |
| K564 Change equipment maintenance schedules in CAMS | 15 |

TABLE A9
MAINTENANCE OPERATIONS CONTROL CENTER COORDINATOR JOB
(STG55)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=13)</u> |
|--|--|
| K560 Access CAMS menus and data screens | 100 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 85 |
| K561 Analyze CAMS data | 85 |
| B45 Interpret policies, directives, or procedures for subordinates | 77 |
| K587 Verify accuracy of CAMS daily inputs | 62 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 62 |
| C80 Write EPRs | 62 |
| C60 Conduct performance feedback worksheet sessions | 62 |
| B30 Counsel personnel on personal or military-related matters | 62 |
| A20 Plan or schedule work priorities | 54 |
| E123 Maintain aircraft or parts status indicators | 46 |
| K573 Correct CAMS work unit codes | 46 |
| K571 Correct CAMS errors noted during daily verification process | 46 |
| B31 Direct development of status indicators, such as boards, graphs, or charts | 46 |
| B29 Conduct supervisory orientations of newly assigned personnel | 46 |
| E150 Verify MICAP conditions | 38 |
| A19 Plan or schedule work assignments | 38 |
| B43 Implement work methods | 38 |
| A15 Establish performance standards for subordinates | 38 |
| D100 Evaluate personnel for training needs | 38 |
| K576 Establish CAMS historical reports | 31 |
| B36 Draft maintenance and inspection reports or charts | 31 |
| B32 Direct flightline maintenance activities | 31 |
| K570 Conduct CAMS uncompleted maintenance event listing inquiries | 31 |
| K578 Initiate equipment maintenance discrepancies in CAMS | 23 |
| K565 Clear or close out completed maintenance discrepancies in CAMS | 23 |
| C58 Analyze workload requirements | 15 |

TABLE A10
QUALITY ASSURANCE JOB (STG117)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=10)</u> |
|---|--|
| G241 Inspect multipin connectors | 100 |
| G239 Inspect coaxial cables and connectors | 100 |
| G237 Inspect aircraft wiring | 100 |
| G243 Inspect waveguides | 100 |
| G240 Inspect electrical relays | 100 |
| A9 Develop inspection procedures | 100 |
| C75 Inspect flightline maintenance actions | 90 |
| E118 Inspect tools or equipment | 90 |
| G242 Inspect triaxial cables and connectors | 90 |
| C77 Investigate accidents or incidents | 90 |
| G238 Inspect chafing problem areas | 90 |
| A11 Develop quality assurance programs | 80 |
| C69 Evaluate suggestions | 80 |
| C70 Evaluate TO improvement reports | 80 |
| C66 Evaluate personnel for compliance with performance standards or TOs | 70 |
| K560 Access CAMS menus and data screens | 70 |
| G255 Research TOs | 70 |
| C76 Inspect personnel for compliance with military standards | 60 |
| C82 Write staff studies, surveys, or special reports, other than training reports | 60 |
| K561 Analyze CAMS data | 60 |
| G260 Trace wiring, system, or interface diagrams | 60 |
| F181 Open or close canopies | 60 |
| E138 Participate in TCTO meetings | 60 |
| C63 Evaluate maintenance and inspection report findings | 60 |
| F180 Open or close airframe components, such as panel or doors | 50 |
| E120 Inventory tools, such as CTKs | 50 |
| B30 Counsel personnel on personal or military-related matters | 50 |
| C72 Identify problem areas using deficiency or service reports | 40 |
| B36 Draft maintenance and inspection reports or charts | 40 |
| C65 Evaluate maintenance or use of workspace, equipment, or supplies | 40 |

TABLE A11
EXPEDITER JOB (STG107)

| <u>TASKS</u> | PERCENT MEMBERS PERFORMING <u>(N=20)</u> |
|---|---|
| A1 Assign maintenance or repair work | 100 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 100 |
| B32 Direct flightline maintenance activities | 95 |
| B49 Supervise F-15/F-111 Avionic Systems Apprentices, Attack Control (AFSC 2A331A) | 85 |
| B50 Supervise F-15/F-111 Avionic Systems Apprentices, Comm, nav, and Pen Aids (AFSC 2A331C) | 80 |
| B51 Supervise F-15/F-111 Avionic Systems Apprentices, Instruments and Flight Controls (AFSC 2A331B) | 80 |
| B27 Adjust daily maintenance plans to meet operational commitments | 75 |
| A19 Plan or schedule work assignments | 75 |
| C75 Inspect flightline maintenance actions | 75 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 75 |
| B54 Supervise F-15/F-111 Avionic Systems Journeyman, Comm, Nav, and Pen Aids (AFSC 2A351C) | 75 |
| B52 Supervise F-15/F-111 Avionic Systems Craftsmen (AFSC 2A371) | 75 |
| B53 Supervise F-15/F-111 Avionic Systems Journeymen, Attack Control (AFSC 2A351A) | 75 |
| B55 Supervise F-15/F-111 Avionic Systems Journeymen, Instruments and Flight Controls (AFSC 2A351B) | 75 |
| A20 Plan or schedule work priorities | 70 |
| K560 Access CAMS menus and data screens | 70 |
| C80 Write EPRs | 65 |
| F181 Open or close canopies | 60 |
| A6 Determine logistics requirements, such as space, personnel, or equipment | 55 |
| C58 Analyze workload requirements | 55 |
| A16 Establish work methods or controls | 50 |
| B45 Interpret policies, directives, or procedures for subordinates | 50 |
| A15 Establish performance standards for subordinates | 50 |

TABLE A12
SUPERVISOR JOB (STG354)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=16)</u> |
|---|--|
| C80 Write EPRs | 100 |
| B30 Counsel personnel on personal or military-related matters | 100 |
| C81 Write recommendations for awards and decorations | 100 |
| C71 Evaluate work schedules | 100 |
| C76 Inspect personnel for compliance with military standards | 100 |
| C75 Inspect flightline maintenance actions | 100 |
| C58 Analyze workload requirements | 100 |
| C60 Conduct performance feedback worksheet sessions | 100 |
| K560 Access CAMS menus and data screens | 94 |
| K561 Analyze CAMS data | 94 |
| A15 Establish performance standards for subordinates | 94 |
| C66 Evaluate personnel for compliance with performance standards or TOs | 94 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 94 |
| B52 Supervise F-15/F-111 Avionic Systems Craftsmen (AFSC 2A371) | 94 |
| B53 Supervise F-15/F-111 Avionic Systems Journeymen, Attack Control (AFSC 2A351A) | 94 |
| B55 Supervise F-15/F-111 Avionic Systems Journeymen, Instruments and Flight Controls (AFSC 2A351B) | 94 |
| B554 Supervise F-15/F-111 Avionic Systems Journeymen, Comm, Nav, and Pen Aids (AFSC 2A351C) | 94 |
| A1 Assign maintenance or repair work | 94 |
| B27 Adjust daily maintenance plans to meet operational commitments | 87 |
| A24 Schedule personnel for leave or TDY assignments | 87 |
| K587 Verify accuracy of CAMS daily inputs | 87 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 87 |
| B29 Conduct supervisory orientations of newly assigned personnel | 87 |
| A19 Plan or schedule work assignments | 87 |
| B32 Direct flightline maintenance activities | 87 |
| D85 Assign OJT trainers | 87 |
| D104 Maintain training records, charts, or graphs | 87 |
| K566 Conduct CAMS delayed discrepancies inquiries prior to, during, or after scheduling maintenance | 81 |
| A20 Plan or schedule work priorities | 81 |
| A2 Assign personnel to duty positions | 81 |
| A16 Establish work methods or controls | 81 |
| E117 Initiate, annotate, or review aircraft flight or maintenance records | 81 |
| B45 Interpret policies, directives, or procedures for subordinates | 75 |
| D100 Evaluate personnel for training needs | 75 |
| A3 Assign sponsors for newly assigned personnel | 75 |
| K570 Conduct CAMS uncompleted maintenance event listing inquiries | 69 |
| K569 Conduct CAMS training status inquiries | 69 |
| C74 Indorse EPRs | 69 |

TABLE A13
MANAGER JOB (STG233)

| <u>TASKS</u> | <u>PERCENT MEMBERS PERFORMING (N=6)</u> |
|--|---|
| A6 Determine logistics requirements, such as space, personnel, or equipment | 100 |
| D100 Evaluate personnel for training needs | 100 |
| A9 Develop inspection procedures | 100 |
| A21 Plan safety or security programs | 100 |
| B45 Interpret policies, directives, or procedures for subordinates | 100 |
| C81 Write recommendations for awards and decorations | 100 |
| B43 Implement work methods | 100 |
| B30 Counsel personnel on personal or military-related matters | 100 |
| K561 Analyze CAMS data | 83 |
| K560 Access CAMS menus and data screens | 83 |
| B31 Direct development of status indicators, such as boards, graphs, or charts | 83 |
| A5 Coordinate maintenance work with appropriate personnel or agencies | 83 |
| K568 Conduct CAMS training | 83 |
| K575 Determine CAMS training requirements | 83 |
| A19 Plan or schedule work assignments | 83 |
| D92 Determine training requirements, other than CAMS training | 83 |
| A15 Establish performance standards for subordinates | 83 |
| A16 Establish work methods or controls | 83 |
| E119 Inventory equipment or supplies | 83 |
| D101 Evaluate progress of trainees | 83 |
| C72 Identify problem areas using deficiency or service reports | 83 |
| A20 Plan or schedule work priorities | 83 |
| A10 Develop organizational or functional charts | 83 |
| C58 Analyze workload requirements | 83 |
| D108 Procure training aids, space, or equipment | 83 |
| D97 Direct or implement training programs | 83 |
| A17 Plan briefings | 83 |
| A2 Assign personnel to duty positions | 83 |
| C76 Inspect personnel for compliance with military standards | 83 |
| D103 Maintain training devices | 83 |
| C68 Evaluate safety or security programs | 83 |
| D104 Maintain training records, charts, or graphs | 83 |
| C65 Evaluate maintenance or use of workspace, equipment, or supplies | 83 |
| A23 Schedule or project equipment replacements | 83 |
| C59 Complete graduate evaluation questionnaires or forms | 83 |
| A22 Schedule equipment or facility inspections | 83 |
| B39 Implement safety or security programs | 83 |
| B40 Implement self-inspection programs | 83 |
| B29 Conduct supervisory orientations of newly assigned personnel | 83 |
| A26 Write job descriptions | 83 |
| A11 Develop quality assurance programs | 83 |
| B38 Implement cost-reduction programs | 83 |

TABLE A14
TOOLS AND EQUIPMENT JOB (STG96)

| <u>TASKS</u> | PERCENT MEMBERS PERFORMING (N=23) |
|---|--|
| E120 Inventory tools, such as CTKs | 100 |
| E118 Inspect tools or equipment | 100 |
| E121 Issue tools, equipment, or supplies | 96 |
| E119 Inventory equipment or supplies | 96 |
| E135 Maintain tool cribs | 87 |
| E126 Maintain ECLs | 83 |
| E139 Perform security checks of tool cribs, hangars, or vehicles | 74 |
| E143 Process tools or equipment for shipment or deployment | 70 |
| C80 Write EPRs | 57 |
| E141 Process damaged tools for distribution or replacement | 52 |
| B47 Review test equipment calibration schedules | 52 |
| C60 Conduct performance feedback worksheet sessions | 48 |
| E134 Maintain TO files | 43 |
| E114 Dress or resurface tools, such as brass hammers or chisels | 43 |
| B35 Direct utilization or maintenance of equipment | 43 |
| E130 Maintain special tools or equipment calibration records | 43 |
| B30 Counsel personnel on personal or military-related matters | 43 |
| E147 Review or update PMEL or TMDE listings | 39 |
| A4 Coordinate calibration of special tools or test equipment with PMEL | 39 |
| E148 Schedule test equipment for repair or calibration | 39 |
| A12 Develop self-inspection programs | 39 |
| A9 Develop inspection procedures | 39 |
| A20 Plan or schedule work priorities | 35 |
| C57 Analyze recurring troubles on equipment identified by deficiency or service reports | 35 |
| B34 Direct maintenance of TO files | 30 |
| B56 Supervise military personnel with AFSCs other than 2A3X1 | 30 |
| E136 Monitor hazardous waste programs | 30 |
| E132 Maintain test equipment calibration or repair reports | 30 |
| E128 Maintain property CA/CRLs | 26 |
| E146 Report TO deficiencies | 17 |

APPENDIX B
ACRONYM/ABBREVIATION LIST

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ACRONYM/ABBREVIATION LIST

| | | | |
|--------|---|----------|--|
| AA/IFF | - air-to-air identification friend or foe | ILS | - instrument landing system |
| ADF | - automatic direction finder | INS | - inertial navigation system |
| AFCS | - automatic flight control system | JQS | - job qualification standard |
| AFPC | - Air Force Personnel Center (formerly AFMPC) | JSS | - jamming subsystem |
| AFRS | - auxiliary flight reference system | JTIDS | - joint tactical information display system |
| AG/IFF | - air-to-ground identification friend or foe | LCCS | - landing configuration caution system |
| AICS | - air inlet control system | LCG | - lead computing gyro |
| ASP | - avionics status panel | LRU | - line replaceable unit |
| BIT | - built-in test | MDC | - maintenance data collection |
| CA/CRL | - custodian authorization/custody receipt listing | MFD | - multifunction display |
| CAMS | - core automated maintenance system | MICAP | - mission capability |
| CC | - central computer | MPDP | - multipurpose display processor |
| CDS | - control and display system | MUX BUSS | - multiplex data buss |
| CMDS | - countermeasures dispenser system | NCI | - navigator control indicator |
| CRS | - countermeasures receiver system | OFP | - operational flight program |
| CTK | - consolidated tool kit | OJT | - on-the-job training |
| DG | - displacement gyro | OWS | - overload warning system |
| DIFM | - due in from maintenance | PDG | - programmable display generator |
| DRD | - digital readout display | PMEL | - precision measurement equipment laboratory |
| ECL | - equipment control listing | POI | - plan of instruction |
| ECM | - electronic countermeasure | RWR | - radar warning receiver |
| EPR | - engine pressure ratio | SPRAM | - special purpose recoverable authorized maintenance |
| EWWS | - electronic warfare warning system | STS | - specialty training standard |
| FLIR | - forward looking infrared | TACAN | - tactical air navigation |
| FTD | - field training detachment | TAFMS | - total active force military service |
| GPS | - global positioning system | TCTO | - time compliance technical order |
| HSI | - horizontal situation indicating | TFR | - terrain following radar |
| HUD | - heads-up display | TMDE | - test, meteorological, diagnostic equipment |
| IBS | - interference blanker system | TO | - technical order |
| ICNIS | - integrated communication navigation and identification system | TTWS | - terminal threat warning system |
| IDS | - integrated display system | | |
| IG | - indicator group | | |